Final Report HumRRO FR-01-31 November 2001

Variations on a Theme: Programs That Contribute to Success at 14 Kentucky Schools

Arthur A. Thacker Lisa E. Koger Milton E. Koger R. Gene Hoffman

Prepared for: The Kentucky Department of Education 500 Mero Street Frankfort, KY 40601

Contract Number M-00003669

Draft

Acknowledgments

The authors of this report would like to thank the teachers, principals, and district representatives who took time out of their busy schedules to talk with us. Without their cooperation this study would not have been possible. We would also like to recognize the other school personnel and students for graciously welcoming us into their schools and classrooms. The office staff at each of the participating schools handled the lion's share of the coordination for interviews and observations and are to be commended for their excellent work. All of these persons helped us in our attempts to represent Kentucky's schools honestly and accurately within this report. Of course, any remaining shortcomings are the responsibility of the authors. While the authors are appreciative of the comments and suggestions provided by staff members at the Kentucky Department of Education (KDE) regarding the research presented in this report, the opinions expressed herein are those of the authors and do not represent the opinion or policy of KDE.

VARIATIONS ON A THEME: PROGRAMS THAT CONTRIBUTE TO SUCCESS AT 14 KENTUCKY SCHOOLS

Table of Contents

Acknowledgments	i
Variations on a Theme: Programs That Contribute to Success at 14 Kentucky Schools	
Abstract	
Introduction	
Sampling	
Methodology	
Limitations of the Study	
Description of Data	
Discussion	
Focus on Literacy	
Early Literacy	
Accelerated Reader	
Writing Programs	
Portfolios	
Focus on Mathematics	
Programs for Low-Performing Students	
Funding	
District Size	
Relationship with Local Universities	12
Availability of Funds for Starting New Programs	
Flexibility and Creative Funding	
Coordinated Effort	
Leadership	14
District	15
Principals	15
Spreading the Curriculum	
Simple Ideas	
Increasing Parental Involvement at School	17
High Expectations	
Teacher Expertise	19
One-on-One Time with Students	19
Use of Time	20
Use of Technology	21
Extra Effort from Teachers	
Special Education	22
Program Flexibility	
Culture of Adventure	
No One Magical Solution	25
Hickory County	26
Hickory County School District	
Hickory Elementary School	27

Use of Creative Funding	28
Educational Initiatives	29
Language Arts/Reading Programs	29
Mathematics Programs	
Arts/Humanities	
Practical Living	
Extended School Services	
Hickory Middle School	
Literacy	31
Mathematics	
School Within a School	33
Gifted/Talented Education	
Elm County	34
Elm County Public Schools	34
Elm Elementary School	34
No Zero Policy	35
Behavior Responsibility Management Program	35
Open Court Phonics	
"DREAM" Team	36
Funding Programs	36
School Planners	36
Summer Work Expectations	36
Chestnut County	37
Chestnut County School District	37
Chestnut Elementary School	39
Focus on Literacy	40
Other Academic Programs	41
Community Involvement	41
Chestnut County Middle School	42
Focus on Literacy	42
Focus on Mathematics	43
Parent Involvement	44
Vice-Principals	45
Other Programs	45
Oak County	46
Oak County School District	46
Oak Elementary School	48
Accelerated Reading	48
Student Expectations	49
Title 1 Program	49
Focus on Literacy	
Other Programs	50
Oak County Middle School	50
Learning Environment	52
Students Using Technology	52
Focus on Literacy	53

Youth Extension Services	53
Collaboration and Time Management	
Sycamore	
Sycamore Independent Schools	56
Sycamore Elementary School	
Sycamore Junior High School	
Pine County	
Pine County Public Schools	61
Pine Elementary School	62
America's Choice	62
Special Education Programs	63
ESS/Portfolios	63
Pine Middle School	63
America's Choice	64
Remediation Programs	64
Mathematics Programs	65
Portfolio Conferencing	65
Maple County	67
Maple County School District	67
Maple Middle School	70
Student Participation	71
Parent Involvement	72
Focus on Literacy	73
Cottonwood County	75
Cottonwood County Public Schools	75
Cottonwood Elementary School	76
Kindergarten program	77
Language Arts Programs	77
Mathematics Programs	79
Beech County	80
Beech County School District	80
Beech Middle School	81
Accelerated Reader	82
Writing Program	82
Portfolio Mentoring	82
Mathematics	82
Other Subjects	83
Bibliography	84
Appendix A School Contact Letter	A-1
Appendix B Teacher Interview Guide	B-1
Appendix C Internet Guide to Programs	C-1

Variations on a Theme: Programs That Contribute to Success at 14 Kentucky Schools

Abstract

As part of an ongoing series of studies investigating the reliability and validity of the Kentucky Core Content Test for the Kentucky Department of Education (KDE), the Human Resources Research Institute (HumRRO) investigated programs at 14 successful Kentucky Schools. Success was determined by gains made on the Kentucky Core Content Test. Schools were selected to ensure a diverse sample. Each school identified programs contributing to its own success. The report is designed around a set of common themes linking those programs, and also contains a school story depicting each participating school. The themes include:

- focus on literacy,
- focus on mathematics,
- programs for low-performing students,
- funding,
- coordinated effort,
- leadership,
- spreading the curriculum among the grade levels,
- simple ideas,
- increasing parental involvement at school,
- high expectations,
- teacher expertise,
- one-on-one time with students.
- use of time,
- use of technology,
- extra effort from teachers,
- special education,
- program flexibility,
- culture of adventure,
- no one magical solution.

This large list of themes is indicative of the variety of programs schools chose to showcase as contributors to their overall success. All of the participating schools indicated that they were still searching for more and better methods for educating children. Participating districts, schools, and personnel were given pseudonyms to protect their privacy. This was done after carefully considering whether to identify schools and districts to help interested parties contact the schools for more information. In the end, we felt that privacy ought to be safeguarded despite the potential usefulness of being able to directly contact schools and districts. However, we retained information about specific programs so that interested parties could contact these programs directly.

Introduction

HumRRO has been visiting schools as part of Kentucky's validity and reliability research associated with the testing and accountability system established by the Kentucky Education Reform Act (KERA, Kentucky Revised Statutes 158.645) for the past five years (Hoffman, Harris, Koger, & Thacker, 1997; Harris, Hoffman, Koger & Thacker, 1998; Thacker, Koger, Hoffman, & Koger, 1999; Thacker, Koger, Hoffman, & Koger, 2000; Thacker, Koger, & Koger, 1998). The topics investigated during the visits have included the link between performance and teacher practice, teacher professional development, and issues related to changing the assessment instrument. This year we focused on the programs within schools that contribute to their success.

This report is organized in two distinct sections. The first is typical of qualitative education research reports and includes sections devoted to sampling, methodology, and a discussion of common themes found during the course of performing the study. The second section contains what, for lack of better terminology, might be called "school stories." There is a story for each school that participated in the study.

Sampling

The sample of schools chosen for this study is a sub-sample of the schools HumRRO visited last year while researching the transition between KIRIS and CATS (Thacker et al., 2000). Of the 31 schools visited last year, 7 elementary and 7 middle schools were chosen for this study. Returning to the same schools that we visited last year gave us three important advantages for this study. First, researchers had first-hand knowledge about the schools and the programs in place in them. That allowed for the selection of schools with differing characteristics, student populations, and challenges. Second, the administrators and teachers were already familiar with HumRRO and were willing to allow us access to their schools. Third, it allowed HumRRO to expose more of the research team to the schools included in the study. Typically, HumRRO researchers visit schools in groups of two. By revisiting schools, those groups could be reconstituted, more researchers included in first-hand discussions about any particular school, and a more global perspective could be attained for describing common themes and important details among the researchers.

The 14 schools were chosen from the initial pool of 31 using several criteria. First, since we were describing successful programs, we eliminated schools that were designated as "declining." All schools in this study were either eligible for rewards during the past testing cycle or were designated as "maintaining." From the remaining schools, an attempt was made to include each of Kentucky's Regional Service Areas. Whenever possible, given these criteria, elementary and middle schools from the same district were chosen in order to gain a better perspective on the district's role in the programs available to the schools. The last criterion for selecting schools was the experiences of the researchers during past visits. When faced with a choice between two schools that both met all of our criteria, we chose the one that was most unlike the other schools in our sample. This study is essentially a case study (Stake, 1995) of the Kentucky

system of public schools, and as such we chose individual cases that illustrate the diversity in that system.

All schools voluntarily participated in this study. Only one school declined to participate and it was replaced with another similar school for the study. Schools, districts, and personnel were given pseudonyms to protect their privacy even though the focus of this study was on positive programs. Information on specific successful programs was retained so that interested parties could contact the programs directly. Participant schools and districts are listed in Table 1.

District	School
Hickory County	Hickory Elementary
	Hickory Middle
Maple County	Maple Middle
Elm County	Elm Elementary
Oak County	Oak Elementary
	Oak Middle
Pine County	Pine Elementary
	Pine Middle
Chestnut County	Chestnut Elementary
	Chestnut Middle
Cottonwood County	Cottonwood Elementary
Sycamore Independent	Sycamore Elementary
	Sycamore Junior High
Beech County	Beech Middle

Table 1. Participating Districts and Schools

Methodology

Each school was contacted via letter (Appendix A), FAX, and by telephone prior to the visits. The letter and the FAX were identical. Telephone contacts were used to verify dates for the school visits and to begin discussion of the programs to be studied. Each district office was also notified regarding the school visit. A representative from each district office was interviewed regarding the district's role in terms of starting and implementing programs within the visited schools.

Two researchers spent 2 days at each participant school. During the visit they conducted interviews, observed classes, and collected documents representing the programs investigated. The interviews were necessarily open (Denzin & Lincoln, 1998), due to the wide variety of programs included, but researchers did use a set of interview topics as a guide whenever possible (Appendix B). In all cases, the interviewers' goals were to gather details about the programs being considered. Classroom observations were conducted in order to gain insight into the implementation of the programs that might not be uncovered during interviews. Observers paid particular attention to the actions of the

teacher and the students and how the implementation of a specific program impacted those actions. Documents were collected as samples of the types of assignments and/or assessments used in the programs.

Interview and observation notes were transcribed for category analysis (Gall, Borg, & Gall, 1996). Documents were labeled and stored for later analysis. One researcher constructed an initial set of categories into which to code all the collected data. All researchers then met and discussed the categories' ability to capture the collected data. The categories were revised until the researchers reached consensus (Patton, 1990). Each of the broad categories is included in the report as a discussion topic. Under each of the broad categories, a set of subcategories was also developed. Subcategories were used to separate the data further and to facilitate reporting. For example, the category "Focus on Literacy" contains subcategories including portfolios, remedial reading, silent reading time, model literacy classrooms, writing laboratories, and added time for language arts. Category analysis was facilitated by the NS/NUD*IST qualitative analysis computer program (Richards, 2000).

Limitations of the Study

The purpose of this study is to inform readers of some of the programs Kentucky schools have identified as successful. It is important to note that the report makes no statement regarding the quality or transferability of those programs. Each school is unique in many ways, so to say that a particular program that is successful in one school would also be successful in another is beyond the scope of the collected data. Indeed, individual teachers may implement a single program very differently, and get very different results, despite following the same program guidelines. It is hoped that instead of recommending a set of programs that are likely to be successful, this study can inform schools of some options that they may not have already considered and give them avenues to investigate those options.

This study was not designed to be generalizable to all schools, to all Kentucky schools, or even to all Kentucky elementary or middle schools. Instead, the sample was chosen to be as diverse as possible in order that many other Kentucky schools might see similarities between themselves and the schools in the sample. While this does not guarantee that the same programs will work in those schools, it can inform those other schools about how similar schools choose to address similar challenges.

Researchers focused on successes within participating schools and districts. Failures, even when voluntarily shared, were omitted unless used to illustrate differences between current success and what was implemented in the past. It is recognized that this creates a positive bias in the study. No attempt was made to temper positive school stories in the second section of this report with negative aspects. Negative aspects are instead regarded as challenges to be overcome, and are only mentioned to illustrate the environment in which many of the programs are designed to function.

Principals were asked to guide researchers toward the successful programs within their schools. This research is therefore dependent on the selections of the principals. It is very possible that programs were omitted because teachers did not choose to participate when approached by their principals. It is also possible that principals did not direct us to certain teachers or programs for other reasons. Given the number of different programs we were shown in each school, our impression is that principals attempted to share as much of their schools with us as they could schedule. Researchers have no way of knowing which programs were omitted from the study.

Description of Data

The data collected during this study includes information regarding a wide variety of programs. The term "program" was intentionally defined in its broadest sense (Appendix C contains a list of programs and accessible Internet sites for more information on the particular programs included.). For purposes of this study, program might refer to commercial educational programs, such as Saxon Phonics. It might refer to a district initiative, such as Chestnut County's Parents As Volunteer Educators (PAVE) program. It might refer to a school initiative, such as Sycamore Elementary School's "skilled teaching areas." It might refer to a particular subject area, such as the language arts program. It might refer to a less definable goal of a school, such as a program to increase the use of technology by students. We left the definition open to give schools as much freedom as possible in choosing what they wanted to showcase during the visit.

For previous studies, HumRRO investigated topics of interest from within particular subject areas (usually science and social studies). That methodology allowed researchers to interview every teacher within a subject and eliminated both the need to select information sources at schools and any biases associated with the selection criteria. The resulting data was complete within its own limited scope. The current study has the potential to be both much less and much more complete. It is possible, even likely, that characteristics of the participant schools were omitted from the current study. However, the data collected during the course of this study demonstrated that our previous limitations of scope narrowly defined the view of the schools we received. In fact, we now know that the very two subjects upon which we focused were often not those receiving the most attention. By avoiding those subject teachers in the past, we may have missed much of the schools' efforts at improving. By handing over the responsibility for selecting our informants at the schools to the principals, we gave up one level of continuity between schools. No two schools showed us exactly the same programs. However, we were able to investigate programs that would have been impossible to anticipate without the help of the principals. Our data are not as uniform as in previous studies, but our understanding of the participants as "whole schools" has improved. In short, while the lens through which we view schools may not be so keenly focused as before, it does provide a larger portion of the school picture.

Because we were focusing on successful programs, we did not ask why the principal did not choose particular programs for inclusion in the study. However, in several instances, principals mentioned that they had not included science and social

studies because we had previously interviewed those teachers. The pervasiveness of this tendency is unknown.

Discussion

Focus on Literacy

Each school we visited showcased some kind of literacy program. Many were district-wide, but many were also homegrown within the schools. Getting students to read and write well was seen as a prerequisite for other courses and took precedence over any other curricular topic.

Early Literacy

The focus on literacy at the elementary level begins in kindergarten. Several of the schools we visited had adopted early literacy programs for use with 5-year-olds. Most of the programs have a strong phonics influence, but include aspects of whole language as well. Students at Oak Elementary use Saxon Phonics regularly, but also produce stories for the school's literary magazine. Students at Cottonwood Elementary have daily journals and regular homework assignments that require them to read short books aloud with their parents. Kindergarten students at Hickory Elementary focus on letter sounds and letter recognition.

Once students enter 1st grade, reading takes precedence in all the elementary schools we visited. Students are expected to read and are regularly assessed regarding their reading skills. Kentucky schools seem to have gone beyond the phonics versus whole language debate. All of the schools we visited reported that a balanced approach to reading was used by the time students entered 1st grade. First grade is also a point at which students can fall behind in reading and be placed in programs designed to help them catch back up. As one teacher from Chestnut Elementary told us, "It's easier to catch them early than late."

Accelerated Reader

The most common literacy program observed among the schools was Accelerated Reader. The program was usually described in very positive terms. For many teachers the accompanying assessment materials were the best aspects of the program because they gave a very clear and easily understandable rating of each child's reading ability. Students' reading is reported in terms of their grade level, which is very easy for teachers and students to understand. Several students made a point to tell the researchers at what level they were reading. Several schools either provide an Accelerated Reader grade on students' report cards or consider Accelerated Reader points/goals as part of the students' language arts/reading grades.

For other teachers, choice was the most important aspect of the program. There are literally thousands of books available for use with Accelerated Reader. Any book can be

an Accelerated Reader book. The only requirements are that the grade level/points have been determined and a comprehension test has been developed for the book. There are both fiction and non-fiction books, and many of the non-fiction books relate directly to other subjects. The students do not all need to read the same book, or even read the same type of book. During the course of this study, students were observed reading a wide variety of books as part of the program. We saw picture books, Newberry Award winners (*A Wrinkle in Time*, by Madeline L'Engle), classics (*Tom Sawyer* by Mark Twain), and even contemporary children's fiction (*Harry Potter and the Sorcerer's Stone* by J. K Rowlings). Teachers explained to us that students were more likely to enjoy reading if they made their own selections.

Still other teachers reported that the system of rewards associated with Accelerated Reader was its most positive aspect. Each time a student reads a book, she takes a test to check her comprehension. If she scores above the minimum requirements for the program, she earns a certain number of points. The points can then be redeemed for a variety of prizes offered by individual schools. Oak Elementary has a rotating trophy that resides each month in the classroom whose students have earned the most points. Chestnut County Middle operated an Accelerated Reader store, where students can purchase merchandise with their points. Several schools also have established a set number of points that all students are expected to reach by designated dates throughout the school year. Two schools posted pictures in the hall of students who had earned large numbers of Accelerated Reader points.

Cottonwood Elementary told us about their Reading Renaissance program, which uses the Accelerated Reader materials, but is the school-wide reading program and includes a designated silent reading time. Reading Renaissance starts in 3rd grade at Cottonwood Elementary. The principal and teachers at Oak Elementary explained that they weren't satisfied with students earning Accelerated Reader points. They have upped the ante by setting test score goals for the comprehension tests within a more limited window than even the Accelerated Reader program recommends. Perhaps surprisingly, their goal is to have students score between 80% and 95% on the tests. They don't want students to score 100% regularly, because that would indicate that the books they were reading weren't challenging enough. They also don't want students scoring lower than 80% because of the high value the school places on reading comprehension.

Students at Pine Elementary use a program called Reading Counts instead of Accelerated Reader. Reading Counts was described as essentially, "just like Accelerated Reader, but a lot cheaper." It has a large number of books from which students can choose. It also includes a computerized testing system and grade level reporting. The program was purchased using bonuses earned from book fairs. Teachers combined the bonus points they'd earned and purchased Reading Counts essentially for free.

Numerous teachers explained their goals for using the Accelerated Reader or similar programs. The most common goal was to improve students' reading abilities. The next most common response to questions about the goals of these programs was "to get kids

to read for fun." Teachers at Oak Elementary regularly read silently with their students to model the behavior and to show students that it can be fun.

Writing Programs

Writing is introduced as early as reading in most schools. Cottonwood Elementary introduces portfolio and on-demand writing in the early primary (K-2) classes. Students in the primary grades at Hickory Elementary are expected to complete a portfolio entry. Once students reach the 3rd or 4th grade, writing takes on a special significance due to the portfolio requirements of the accountability system and the open-response questions on the Kentucky Core Content Test.

School districts have devised a variety of methods for improving student writing. Cottonwood County uses specially trained writing cluster leaders to help inform classroom teachers regarding the latest writing strategies. Pine County adopted the America's Choice program for elementary schools this year. Two specially trained teachers serve each participating school as part of the program; one as a literacy coordinator, the other as a design coach. The first two years of the program emphasize reading and writing, with writing receiving most of the attention during the first year.

Individual schools have also created their own methodologies for improving writing. Oak Elementary supports two separate writing laboratories and two writing lab teachers. Students attend the labs once per week and have a variety of assignments. One of the labs contains a set of laptop computers that students use to word process their writing. Pine Elementary has embraced the America's Choice standards for writing in grades K-3. The literacy coordinator told us that the standards were much higher for those grades than Kentucky writing standards. However, she also told us that 4th-grade Kentucky standards were higher, so they've decided to always assume that the more difficult standard is the one they should be meeting. Maple Middle has established a model literacy classroom, designed especially to make students comfortable reading and writing and to facilitate students sharing their writings with each other. The school also participates in the Louisville Writing Project, which is designed to improve student writing across the curriculum, not just in language arts classes.

Portfolios

Since portfolios are so important to schools, many have portfolio-specific initiatives. Mr. Whitlow, Pine Middle's principal, told us that portfolios were "really the only part of the accountability system that we have much control over." He was referring to teachers' direct involvement in portfolio instruction and ensuring portfolio completion. Pine Middle has established an innovative program for portfolio conferencing that takes advantage of community volunteers. The 20-25 volunteers have been trained to conference with students and meet several times a year in the library to do so. Pine Elementary uses much of its ESS program to assist students in completing portfolios. Students use the time to word process their entries and to perform Internet research.

Teachers at Sycamore Elementary have taken an integrated approach to completing portfolios. Students work with computers from the very beginning of the portfolio process. The school also hires a substitute teacher to facilitate the regular teacher conferencing with students about their portfolio entries. Sycamore Junior High has decided to spread the responsibility for teaching writing, and more specifically for preparing portfolios, among more teachers. Now 8th-grade teachers also teach sections of 7th-grade language arts and vice versa. Cottonwood Elementary takes the idea of integrating the development of portfolios even further. First, writing instruction is taught in classes that contain both 3rd and 4th graders, yielding two years of challenging instruction. In addition, the writing cluster leader is responsible for training all certified staff to score portfolios, and then involves all staff members in the process. She told us the program was so successful that last year no student at Cottonwood Elementary had a Novice portfolio.

Focus on Mathematics

Second only to literacy, the schools we visited also nearly always showcased mathematics programs. Like literacy, mathematics was an important part of the kindergarten curriculum. Students at Cottonwood Elementary used both the Touchpoint and Saxon Mathematics programs in kindergarten. Touchpoint math uses counting points on each number to add a kinesthetic aspect to learning to count. Each number has a corresponding number of touch points (1 for 1, 2 for 2, etc.). Saxon Mathematics is a school-wide program that introduces broad mathematics concepts early and then builds on those concepts each year. This spiraled approach has not won universal support at Cottonwood Elementary because it does not contain formal units like teachers used previously. For instance, there is not a specific clock or time unit. Some teachers supplemented Saxon Mathematics with formal units from the previous mathematics program.

Pine Middle emphasizes mathematics in 8th grade. Seventh-grade students have one mathematics course per day, but 8th-grade students have two. During one of the 8th-grade courses, students attend a traditional classroom and work on problem solving aspects of mathematics. During our observation, we saw students solving and graphing functions as well as scoring their own open-response items as a scrimmage for the upcoming Kentucky Core Content Test. When that same group of students crossed the hall for their next mathematics course, they worked on Accelerated Math. Each student worked at his or her own level and completed problem sets and tests in order to meet mathematical objectives described by the program. Each student received a different set of problems and a different test, even if they were working on the same topic. The program is new at Pine Middle this semester, although 8th-grade students had two math classes before the school got the program. Previously, the teachers simple split topics listed in the Core Content between them. The teacher and students were very positive about Accelerated Math.

Programs for Low-Performing Students

Several schools showed us programs designed to help struggling students. Again, these programs were almost always directed toward literacy and mathematics. They ranged from one-on-one instruction for 30 minutes per day to an immersion program where 6th graders received only reading, writing, and mathematics instruction in the hopes of bringing them up to a point that they could be successful in the 7th grade with a more typical program of studies. All the schools we visited have programs for identifying and providing remediation for students who have fallen behind.

The most intensive remediation program we found was at Maple Middle School. Sixth-grade students who had fallen behind their classmates were pulled out of the regular classes and placed in an immersion program for literacy and mathematics. Students spent their entire day in the program and received intensive instruction in reading, writing, and mathematics. Two teachers operate the program and team-teach the course. The students do not attend social studies, science, or other classes. Their program is conducted in self-contained classrooms. The goal of the program is to improve the students' reading, writing, and mathematics skills to a point that they can be successful with a more traditional schedule when they reach the 7th grade. Those skills are viewed as prerequisites for all other classes, and any time lost in attending other classes is viewed as offset by the students' increased chances of success.

Chestnut County Middle School has developed a somewhat less intensive program to help students who have fallen behind in reading. The school has identified the 25 students from each of the student clusters (clusters contain about 110 students), and placed them in a specially designed reading course for 1 hour per day, 4 days per week. Special education students are pulled from those 25 and placed in a separate reading course. The remaining students (usually about 20) go to the Reading Recovery Program (This program was designed at the middle school and is not affiliated with the Reading Recovery Program used at Chestnut Elementary. The two programs share the same name by coincidence.). When in Reading Recovery students read Accelerated Reader books and take the accompanying tests. Two reading specialists, both of whom are present for all classes, staff the program. Students in the program typically score at least two grade levels lower than their current grade in reading on the STAR test. The program is new at the middle school, but early indications suggest that students are gaining about one grade level per semester in the program.

Mr. Morrison, Chestnut County Middle's principal, told us that the school had also identified students who were struggling in mathematics. However, the school is still looking for a program to use with those students. Mr. Morrison told us that Accelerated Math was not an option because it did not emphasize problem-solving skills to the degree desired at the school.

Reading Recovery at Chestnut Elementary is an entirely different program and is only for 1st graders who score in the bottom 20% on an assessment of reading. Those students are pulled out of class during their regular reading time to work one-on-one with a specially trained teacher. During 30-minute work sessions students complete the following seven tasks: 1) reread several familiar books (may take place at home), 2) reread a book

introduced during the previous lesson while the teacher observes and records the student's reading behaviors, 3) letter identification and learning how words work, 4) write a story with teacher providing opportunities for child to hear and record sounds in words, 5) rearrange his or her story from a cut-up sentence strip provided by the teacher, 6) teacher introduces a new book carefully selected for its learning opportunities, 7) child reads the new book orchestrating his or her current problem-solving strategies. At Chestnut Elementary an eighth step is added. Students take the last book they read home to read again with parents or guardians and also take the cut-up sentence pieces home to reconstruct the story they wrote in class. Students report on what was done at home at the beginning of each session. Reading Recovery is an international non-profit program started in New Zealand by Marie M. Clay (1979, 1985) to help 1st-grade children who have trouble learning to read and write.

Hickory Elementary also uses an early intervention program in reading. Reading Intervention is for students as young as 1st grade and, like Reading Recovery provides special help for students who have fallen behind. An assistant to the reading specialist operates the program under the direction of the reading specialist, leaving the reading specialist to work with students who need even more help than the assistant can provide.

Funding

District Size

Schools and districts have varying degrees of skill and success at finding external funding for programs. Small rural districts often lack experience with grant writing and may not have the manpower or expertise enjoyed by some of the larger districts. The number and variety of programs described by Dr. Foreman in Maple County and by Dr. Bell in Elm County were staggering compared to the number in smaller districts. Because of their size, Maple and Elm Counties employ a very large number of people with very specialized jobs, and can bring to bear expertise in a wide variety of educational fields. By contrast, the Pine County district office is located in what appears to be a remodeled gas station and only has room for a few offices. The ratio of students to administrators may be similar in these counties, but it seems clear that Maple and Elm Counties have an advantage when it comes to meeting the specific requirements of some of the more demanding grant proposals.

Dr. Mitchell, Sycamore's superintendent, knows the value of an expanded staff. He convinced the school board to allow him to hire a grant writer. The grant writer has, in turn, generated considerable funding for extra programs and staff positions.

Mr. Musgrave, Pine County Schools' instructional supervisor, told us that he would like to see more cooperation between the small school districts in Eastern Kentucky. That idea is not new. In fact, Oak County cooperates with the counties surrounding it to operate an alternative program. None of the participating counties had enough students to operate the program alone, so they joined forces and funds to create it. Smaller school districts

have witnessed the advantages enjoyed by the Maple and Elm County systems, and some are beginning to seek solutions that extend beyond the borders of the county.

Relationship with Local Universities

A good working relationship with a university can also be a big source of extra support for schools. First, universities that train prospective teachers create a symbiotic relationship with local schools. Universities need to place education students in schools to observe veteran teachers, complete student teaching, and just get a feel for what working on a school faculty is like. Many also require students to meet a service requirement that is often filled by volunteering at a local school. The schools get the advantage of having extra adults in the building. The teachers get some much-needed assistance in exchange for assisting with the training of student teachers. Students are exposed to a wider variety of educated adults. School principals and council members are given an opportunity to discover who are the most promising candidates in a particular graduating class, giving them an advantage for recruiting good teachers. Teachers at Oak Elementary were so used to having adults in their classrooms helping with assignments or tutoring individual students that several gave researchers duties to perform during classroom observations.

Also, university professors are required to conduct research. Education departments have a great need to gain access to schools and individual classrooms willing to allow that research. In many instances the research will require that the school or classroom adopt a particular program of study, or test a new teaching strategy. Those programs are often supplied as part of the grant that funds the research. For example, a state university used funds from a PT³ grant (Preparing Tomorrow's Teachers to use Technology) designed to support technology use in the classroom to help Oak Middle School implement an innovative technology program. In the program, known as Gen YES (Generation Youth and Educators Succeeding), students create technological educational tools for teachers to use in their classrooms. The university received access to the students participating in the program. For schools that are not located near a college or university these kinds of opportunities are rare.

Availability of Funds for Starting New Programs

Many programs find their way into schools because funding is associated with starting the program. When the start-up funding runs out, there may not be a plan to keep the program functioning at the school. More often than not these plans fail because it is in the school's interest to simply start a similar, newly funded program rather than to continue a non-funded program.

Maple Middle School is a good example. For the past 2 years the school has been working with the Louisville Writing Project, and artifacts from the writing program are found throughout the building. The writing program has a hand in curriculum design, professional development, and instructional methodology. The project is funded through a 3-year CSRD (Comprehensive School Reform Directive) grant and is in its second year. Some teachers told us that once they were trained, they hoped they could continue to implement the program without the support that comes with the grant. The principal explained that once the funding ran out, the school would certainly keep the best aspects of the program, but would also use other methods/programs for improving student performance.

Oak Elementary has recently begun at least two programs funded through Title 1. The school only recently became eligible for school-wide Title 1 funds. Next year, if the demographic make-up of the school shifts, it might be disqualified for school-wide Title 1 and be required to direct services specifically toward economically disadvantaged students. If that happens, the programs funded currently through Title 1 will necessarily be altered or eliminated, irrespective of their effectiveness.

Flexibility and Creative Funding

Schools have also found ways to adapt to meet both grant requirements and Kentucky's Core Content (KDE, 1996). Chestnut County officials applied for and received a CSRD (Comprehensive School Reform Demonstration Program) grant that they used to fund several curriculum alignment efforts. One of the requirements of the grant was that the district was required to choose from a list of research-based school reform models in order to receive the funding. Since simply aligning curriculum according to Kentucky's Core Content for Assessment would not meet the stipulations of the grant, the district adopted Core Knowledge, which places a heavy emphasis on curriculum alignment, but whose curriculum is somewhat different from the Core Content. In order to create a curriculum alignment system that coincided with two different curriculums, subject area committees created crosswalks between the Kentucky Core Content and Core Knowledge curriculums. When we originally visited Chestnut County, the practice of adopting a curriculum different from the Core Content only to then link it back to the Core Content seemed like an unnecessarily difficult way of aligning curriculum. Once we had a chance to speak at length with persons in the district who knew the history of the adoption of Core Knowledge, the rationale became clear.

Class size is an important consideration when allocating the per pupil funds received by schools. Two schools we visited took very different approaches toward establishing the student/teacher ratio. Hickory Elementary teachers chose to have large class sizes and instructional assistants. Ms. Meeks, the principal, explained that for her school, having additional adults in the classroom worked better than reducing class size but having only one teacher in the classroom. The larger class sizes have also allowed the school to fund additional teaching positions for subjects that might be left out or deemphasized otherwise, like art or physical education.

On the other hand, Beech Middle school in Beech County takes exactly the opposite approach. Mr. Reeves, the principal, told us that small class sizes were extremely important at his school. In fact, programs and initiatives are not likely to be implemented in his school if funding them means allowing class sizes to increase.

Coordinated Effort

Establishing a school-wide effort is very important to the participating schools and districts. Aside from programs that depend directly on coordination of efforts, such as curriculum alignment, exit criteria, or mainstreaming special education students, there are several more subtle efforts designed to create partnerships among teachers or schools. For example, in Pine County, the district office is working on curriculum alignment, Mr. Musgrave, instructional supervisor for the district, told us that the district is focusing on "transition points." Transition points are those grade/subjects responsible for preparing students for the next level. For instance, the science portion of the Kentucky accountability test is administered in the 4th, 7th, and 11th grades. In Pine County, however, students remain at the elementary school for 5th and 6th grade and at the middle school for 8th grade. This means that science in those grades cannot affect their current school's accountability index. There has been a tendency in Pine County (and other districts) to reduce the amount of science instruction students receive after they take the test, but before they leave the school. Particularly in 5th and 8th grades, science is de-emphasized in favor of mathematics, social studies, or other subjects tested in those grades. Mr. Musgrave hopes that by holding meetings and creating a dialogue between science teachers at all levels, the need for a strong and consistent science curriculum will become evident. He told us that he hopes the curriculum alignment meetings will result in a commitment to require at least 3 hours of science instruction in all grades.

A portion of the writing program that Maple Middle uses also creates a coordinated effort. The Louisville Writing Project is particularly directed toward establishing common ground from which teachers can approach instruction. Each subject area is responsible for presenting its own professional development at regularly scheduled meetings (about once per week). During their meetings they discuss common lesson plans or assessments, they discuss which subject-area books should be bought for the library and which need to be in the classroom, and they learn new ideas and new techniques from each other.

Leadership

District

Both district and principal leadership were nearly universally described as vital to success. Teachers almost always credited a supportive staff with the success of their particular programs. Principals, in turn, often discussed the leadership and involvement of the district as a component of the school's progress. Ms. Stillwell and Mr. Shepherd, both of the Oak County school district, told us that one strategy the district employed was to place strong building leaders in schools and then give them the support they needed to make improvements. That sort of thinking was common among the districts we visited. Dr. Harrison, from Hickory County, told us that the district has changed its role from supervisory to supporting over recent years. Dr. Foreman, in Maple County, echoed that message. These districts, as well as Elm County, say that some of the most important things they do involve professional development for principals and other leaders in their districts.

Districts demonstrated their support of schools in other ways, as well. In Beech County members of the district office regularly visit schools. They observe classrooms and question students regarding the objectives of their lessons, how well they think they are performing, and how they know when they've done good work. In Oak County, rather than visiting students, the school board has teachers give presentations during its regularly scheduled meetings. Teachers regularly demonstrate instructional methodologies for the board. Often, students will also present projects, innovative learning strategies, or especially technology for the board members. Both systems are designed to improve the link between district and the schools that comprise it. In Pine County district personnel help the schools by volunteering to help with portfolio conferencing, as well.

Maple County purchases days for extra administrators to assist schools, particularly those that score poorly on the Kentucky Core Content Test. They have also given low-performing schools the option of adding calendar days to their school year. A more direct form of support comes from the School Dialog Process. A team of six or seven individuals from the district office will review a school's consolidated plan (KDE, 1997) and then visit the school in order to check for progress toward school goals. The program was put in place to help schools pay close attention to their own improvement plans and to hold them accountable for making the changes they outline in those plans.

Principals

When teachers were asked about the success of their particular programs, most told us that the support of their school's principal was a contributing factor. The manner of support that they described varied widely from school to school. For some teachers, support came in the form of simply allowing them to alter their class schedule to accommodate the program. For instance, Mr. Whitlow, Pine Middle's principal, has helped the school create a schedule that allows 8th graders to attend two math classes per day. For others, the principal supports programs by directing funds to meet the demands of the teachers. Mr. Reeves, principal at Beech Middle, directs much of the school's funds toward reducing class size.

Spreading the Curriculum

An important aspect of improving schools is that more and more is expected of the lower grades. Kindergarten is seen as a very important academic year, and is taught for a full day in many schools. This is only the second year that kindergarten has been taught for a full day at Cottonwood Elementary, and the school is taking advantage of the extra time. Students study language arts, mathematics, and even work independently at science and social studies centers in the classroom. The additional time is already paying dividends in kindergarten, according to one kindergarten teacher. She said that in previous years about half of a typical kindergarten class would be able to read by the end of the year. At the time of our visit, she said that nearly all her students were reading.

Ms. Garland, Elm Elementary's principal, told us that during her 32 years' experience she had never seen a child or parent who was not excited about beginning kindergarten. She said, "It is the school's fault if that (excitement about school) changes (over the child's school years)." Ms. Ellis, Oak Elementary's principal, explained that the school had adopted Saxon Phonics for kindergarten because the school was not reaching some students and those students struggled in later grades. The message from all these schools is that students must not be allowed to fall behind, and guarding against falling behind must begin as soon as the school and students come together.

Simple Ideas

One of the things that struck us during this round of visits was that some simple ideas made a great deal of difference for teachers and schools. A good example is Saxon Phonics, used in kindergarten and special education classes at Oak Elementary and Cottonwood Elementary. All materials needed to implement the program come filed in a box for the teacher. All handouts come as complete classroom sets, so there is no copying worksheets. Lessons are organized sequentially and contain a variety of activities designed to reach students of various learning styles. There are letter pieces that the students use to spell words, pencil and paper assignments, and scripted rules, letter sounds, and other information arranged for the teacher to read to students. The program is very structured and students typically responded in unison to questions or prompts from the teacher. The materials and methodology employed by the program look like a variety of other phonics programs, but the convenience and organization of the program leaves the teacher to deal with instruction and assessment instead of preparation.

High expectations work for students and teachers alike. Mr. Brown, Sycamore Elementary's principal, explained that his school emphasized teaching rather than "high priced activities or tools." He described his teaching staff as stable and experienced, but not close to retirement. Like their students, they are held to high expectations. "Doing extra is expected," he said.

Provide a school facility that demonstrates pride in education, and the student's behavior will shift toward the expectations embodied by the facility. This theory was in

large part the reason for Oak Middle's extensive renovation. The school now looks much like an upscale office building. There is carpet on most floors, there are potted plants in strategic locations, many computers are located in ergonomically designed desks, and there are prints of important artwork on the wall of virtually every common area of the building, including the restrooms. The principal, Mr. Montgomery, told us that the school had essentially no vandalism and that incidences of violent behavior, once common at Oak Middle, were extremely rare. Several teachers at Oak Middle can remember "a school out of control," but that image is difficult to reconcile with the school we saw during our visit. Remodeling the school environment was not the only method of improving discipline employed at Oak, but it was an important part of the overall strategy.

Increasing Parental Involvement at School

Most schools have programs in place to get parents more involved in their child's education. Innovative programs are beginning to show success at schools where parents have not traditionally been very visible. Several schools have recently designed programs to extend their influence beyond the walls of the school building and into the homes of the students who attend.

Maple Middle School is not a place where you would expect to see a lot of parents. Maple Middle serves a poor urban population. It is surrounded by other schools where either traditional or magnet programs lure successful students away. And yet, during the second day of our visit, parents filled the library for a very atypical awards luncheon. One student from each homeroom is rewarded each month with a special luncheon through a schoolwide program designed to recognize students who are making positive changes. The luncheon, held with the help of the Family Resource Center (FRC) and a local restaurant, gives recognized students the opportunity to invite their parents to come to the school for lunch and to hear about the good things that their child did to qualify for the program. Students can qualify for the luncheon by breaking negative patterns in their education. Some improve academically, others change their behavior for the better, and still others improve their attitudes and effort levels. Teachers, librarians, the FRC director, and the principal attend the luncheon. For many parents the luncheon represents the first time they have had positive contact with their child's school.

Chestnut Elementary School in Chestnut County has more in common with Maple Middle School than one might at first imagine. Despite the fact that one is a small elementary school in rural Eastern Kentucky and the other is an urban middle school, they face similar problems because both serve a very poor community of students. Chestnut Elementary has been much more successful academically than Maple Middle, but it still faces challenges getting parents to participate in school activities. Chestnut County sponsors a program, called Parents as Volunteer Educators (PAVE), that has helped get parents into the classroom. The district had about 600 parents last year who volunteered with the program, and about 150 attended a banquet held in their honor. Chestnut Elementary participates in the program and had about 70-80 parent volunteers last year, but it also gathers community support from non-parents. Chestnut Elementary's Adopt-a-Grandparent program recruits retired persons to work in the school as teacher's aides.

Mrs. Walsh, Chestnut Elementary's principal, directs a lot of effort at providing character education for the students and giving them positive role models in the form of these volunteers.

High Expectations

Most districts are establishing some sort of system to increase the expectations for students at each grade level. Some schools have done so, as well. The most common method of establishing high expectations among the participating schools was to create a curriculum alignment plan that moves topics toward lower grades. Curriculum alignment plans typically did not establish minimum competency standards, but were instead designed to increase the level of teaching and learning across the system.

At least two districts are considering implementing a "value-added" system of accountability. Oak County could begin using such a system as early as next year. They have already spoken with Dr. William Sanders, a leading expert on value-added accountability, and will use CTB's Terra Nova testing system to gauge the success of teachers in the district. According to Oak Superintendent Richardson, the system would work by establishing a specific amount of improvement each student was expected to attain during each year they attended school. Teachers whose students gained more than expected would be deemed successful, while those whose students did not gain as much as expected would be retrained or assisted in some other way. Superintendent Richardson explained that it would take 3 years of test data to begin making decisions regarding teacher-effectiveness. He also told us that teachers who continued to fail to meet their goals for student gains would be provided a great deal of assistance and professional development. He expressed confidence that when teachers were confronted with evidence of a need to change, most would be willing to work toward improvement.

Another method districts are using to increase expectations is to establish exit criteria for students to move from grade to grade. So far, none of the districts we visited have these exit criteria formally in place, but several talked about work they were doing currently to establish them. In fact, one of the complaints about Kentucky's current system of testing was that it was not suitable as a part of student exit criteria. As one district representative from Chestnut County told us, "Kentucky's test doesn't give us what we need." He explained that each teacher needed to receive a listing of his or her students' strengths and weaknesses and that the test results needed to be back before the end of the year. The district is planning to use CTB's test for that purpose and is purchasing the test for all grades, supplementing grades 3, 6, and 9, which are given as part of Kentucky's current accountability system.

A common theme among the districts' plans for increasing student performance was to move the level of accountability lower. Kentucky's accountability system is clearly school-level. All decisions regarding rewards or assistance are for the school as a whole. Districts were searching for ways to hold individual teachers or students accountable.

Schools were also looking for methods of establishing high expectations. Two elementary schools told us that students were expected to do homework every night. Mr. Brown, Sycamore Elementary's principal, told us students in the 4th, 5th, and 6th grades typically had from one to one and a half hours of homework per night. Mr. Brown noted that, because of the short school day, lessons must be reinforced by homework. That sentiment was echoed at Elm Elementary. Teachers were expected to provide 6 hours per day of instruction. Reinforcement of lessons occurs at home. Students are not allowed to receive zeros, so all homework must be completed as a matter of policy.

Teacher Expertise

Observing an expert teacher is a powerful argument for the need for more expert teachers. Some districts have come up with innovative ways of spreading the influence of expert teachers to more students and possibly to more teachers as well. Chestnut County has established a science and mathematics resource teacher who regularly assists middle school teachers with science laboratories or hands-on experiences. He might also work with students who have fallen behind to help them catch up to their classmates.

As part of the America's Choice program at Pine Elementary, one teacher was specially trained as a design coach, another as a literacy coach. Those teachers made their way through the other classes at the school giving suggestions on redesigning the classroom environment or instructional methodology, and also modeled the program for teachers who did not receive the training. They began in 4th grade, because of Kentucky's portfolio requirements, but will eventually train teachers in all grades.

One-on-One Time with Students

Several schools value one-on-one time between teachers and students so much that they have found ways to fund those opportunities. It's a very expensive way of educating, but is being tested in various schools, especially for students who have fallen behind. Reading Recovery at Chestnut Elementary is one such program. It is designed for 1st grade students who have fallen behind in reading. Each participating student spends 30 minutes with the teacher every school day. The program is currently only taught for a half-day at the school, which means that only about six students can participate per teacher. In addition, the cost of training for the teacher operating the program is also high. The district estimates that training and materials for the initial year of the program cost about \$18,000 per teacher. Training consists of workshops held during the summer and a weekly professional development meeting. Teachers must demonstrate their skills during the professional development meetings and serve as evaluators for each other. In order to demonstrate instruction, teachers must bring students (and often parents) to professional development meetings. Add to all these requirements the fact that the training takes place more than 40 miles from Chestnut Elementary and it becomes clear how much the program is valued. Although the program is new to the school this year, the teacher running it has already seen one of her students rejoin his regular class. His reading level is now above the 50th percentile for the class (a requirement to test out of the program). Mrs. Walsh, the

principal, told us that she hopes the program pays for itself by helping students avoid being classified for special education as a result of simply getting too far behind early in school.

At Pine Elementary School, the ESS program is designed for portfolio conferencing. A teacher estimated that every 4th-grade student would come to ESS at least once before turning in a portfolio, but the classes are kept intentionally small. In addition to allowing students some extra time on the computer to type their entries or to do Internet research, ESS allows teachers to spend time reading students' entries and conferencing one-on-one with students. When we observed the ESS class, six students worked on portfolios with two teachers. Again, the cost for such a program is high. The school provides transportation for the students who participate, and only a few students can participate at a time.

Use of Time

Elm Elementary has a policy to provide instruction for every minute of every hour of every school day. Parents are guaranteed at the beginning of each year that students will receive 6 hours of instruction per day. Homework is mandatory at the school and failure is not allowed. Students leave school for the summer with an assignment workbook and they are expected to complete it prior to returning to school in the fall. Students are expected to read a novel during the summer and begin school ready to discuss it. This may seem like a simple idea, but paying close attention to the use of instructional time is given much of the credit for this school's success.

Beech County pays attention to instructional time by conducting surprise school visits. At any time, a principal or district representative might come into a classroom and ask students what they were doing. Students are also asked why they are working on that assignment, if their work is good, and how they know their work is good. The surprise school walkthroughs help maintain the district's focus on clear student expectations, but they also serve to reinforce the idea that students should always be working on something.

Use of Technology

It is not enough to have technology in schools. Students must use the technology in meaningful ways for it to be an effective aspect of instruction. Oak County Middle School has embraced this philosophy and many programs at Oak Middle have a large technology component.

The district has a technology initiative and supported a professional development session last summer in which teachers assembled their own replacement classroom computers and practiced with new software. The computer was part of the compensation teachers received for attending the professional development session. Evidence of the district's support of technology was obvious at Oak Middle and Oak Elementary Schools. The middle school, however, had also established several programs that used computers and other technology in ways that were atypical of the other participant schools.

Every participating school had at least one computer lab and several had two. The most common use of the computer labs we observed was for word processing portfolio entries. It is possible that because our school visits were held so close to the portfolio due date, we saw an inordinate amount of portfolio work. However, most language arts teachers told us that portfolio creation was spread throughout the year and not reserved for the few weeks prior to the due date. The next most common use of the computer we saw was in writing labs, again primarily word processing, although not necessarily dedicated to creating portfolios.

At Oak Middle students were using the computers in the media center to create teaching and learning tools as part of a Preparing Tomorrow's Teachers to use Technology (PT³) grant. The students were working with a group called Gen YES (Generation Youth and Educators Succeeding), and were developing a variety of products for use in the classrooms of their collaborating teachers. Students were designing web sites, creating interactive educational games, developing a music library for use in projected movement and dance class, and doing other innovative things with the school's technology. Perhaps the most impressive thing the students were doing was stretching the technological capacity of their teachers. Each project was created for collaborating teachers to use in their classrooms. The students designed their projects with specific instructional goals and then submitted their ideas to a consulting group working with Gen YES. Once approved, the students' designs were turned into products. The products were then demonstrated for the collaborating teacher in an instructional setting.

Oak Middle also has ties to the National Air and Space Administration (NASA). The school's Gifted and Talented program incorporates NASA-related engineering projects. When we visited they were building model satellites to strict design specifications. In a previous semester, a student's airplane interior design placed 3rd in a national competition. Middle school students at Oak also learn to operate global positioning equipment, flight simulators, and a variety of other technical equipment. Mr. Montgomery, the principal, told us that he hopes the focus on technology will help prepare students for the careers of the future.

Extra Effort from Teachers

Many principals described instances when teachers went above and beyond the call of duty. Some drove 100 miles per week for professional development. Others volunteered to do extra duty activities at the school. Teachers regularly do more than their job description demands.

Performing extra duties was often described as a requirement for teachers. Mr. Brown, Sycamore Elementary's principal, told us, "Doing extra is expected." At Oak Elementary, Maple Middle, and Beech Middle, we observed language arts teachers regularly modeling writing with their students. During the time students are writing, so are their teachers. Teachers do not have the luxury of grading papers, performing administrative duties, or planning lessons while the students are occupied reading or writing. Instead, the teachers have chosen to demonstrate the importance of reading and writing by taking time to do those activities with their students.

At least three elementary schools we visited have policies to assign and collect homework regularly. While this may not seem above and beyond teachers' regular duties, the amounts of homework and the checking are extensive and are in addition to normal classroom assignments. All three schools assign homework starting in kindergarten, and it was not uncommon to see very young students carrying large backpacks or rolling their books out on wheeled carts as they made their ways to buses in the afternoons. One of the principals did point out that if students were organized they would not need to take all their books home every night. On the other hand, the wheeled backpacks did ensure that students could carry home everything they needed.

In addition to academic extra duties, teachers are regularly called on to perform other duties. Particularly in schools with large populations of impoverished students, it was common to hear stories of teachers visiting homes or helping families learn about social programs. Family Resource Centers (FRCs) in schools perform a wide variety of these sorts of functions, but the FRC directors were not shy about enlisting the help of teachers. Mrs. Walsh, Chestnut Elementary's principal, told us that caring was the most important factor (contributing to the success of the school) of her teaching staff.

Special Education

Nearly every school we visited had us interview their special education teachers and visit their classrooms. Special education is an important aspect of the school as a whole and most schools were very proud of what was accomplished in those programs. The efforts of special education teachers and the accomplishments of their students cannot be overstated.

Special education varies from district to district, from school to school, and even from student to student. No other field of education requires that teachers know their students so completely. Programs in special education defy description because of the

individual attention given to each student. Chestnut County Middle School has an interpreter on staff to work with a single deaf child. She also spends some time working with another child who has lost a great deal of his hearing, but she has followed the deaf student from elementary school to middle school, and she will continue to follow her into high school.

Special education teachers are adept at gathering resources to meet their students' needs. An Oak Elementary teacher took advantage of the fact that she was being observed by pairing a researcher with a mainstreamed child during reading instruction. At Chestnut County Middle, bus drivers go shopping with special education teachers and students, serving as extra monitors. Several teachers told us about parent volunteers and affiliations with local charities and government agencies.

Special education teachers must also be expert collaborators, mediators, and cooperators. They must become experts at assessment and accommodation. Each student has an Individual Education Plan (IEP) that the teacher helps create. That plan helps set goals for the student's progress during regular intervals. Students may be mainstreamed, and therefore in the regular classroom, with or without a collaborating teacher. They may be in self-contained classrooms and work only with special education teachers and assistants. They may spend some of the day in each. Special education teachers must work with regular classroom teachers, either as a collaborating teacher present in the classroom during instruction, as a resource teacher helping regular teachers devise altered lessons or assignments for particular students, or as an instructor relying on regular teachers to provide assistance in creating a curriculum that includes subject area material. In addition, the special education teacher must devise accommodations for students to use during assessments that allow the students to have access to the tests, while not unnecessarily altering the outcome or value of the assessment. This takes on a particular significance for Kentucky's accountability tests. Two teachers asked for information about alternative portfolios that their students were completing. They were concerned that their own limitations in terms of helping students prepare portfolios might hide aspects of the students' accomplishments that the portfolios were designed to demonstrate.

Program Flexibility

Many schools have adopted Accelerated Reader, although to widely varying extents. A big reason for the success of the program is that students can work at their own pace on individual assignments. Accelerated Reader is used to "fill the gaps" when a student finishes an assignment early or when 60% of the class is on a field trip. A short orientation period is all that is needed before students can choose their own books, read them, and operate the computer testing program that checks their comprehension with little or no supervision. Classes of 6- and 7-year-olds demonstrated a great deal of expertise and familiarity with all aspects of the program.

In some cases teachers told us that their programs would not have been possible without a great deal of flexibility in terms of scheduling or altering the way classes were taught. The middle school team or family concept is a good example. Many middle

schools operate as several smaller teams, essentially schools within the larger school. Each team may have a great deal of flexibility to set its own schedule, move students from one class to another, and create common meeting times for same-subject teachers or for the team as a whole. The strategy has the added advantage that teachers can know fewer students better, and that parents can meet with all their child's teachers at once.

In Oak Middle School, flexibility means allowing teachers the freedom to create their own systems of instruction. The principal explained that once the teachers closed the doors to their classrooms, they'd do what they want. He described his job as making sure that the teachers at the school had high expectations of their students and themselves, and would therefore do things that were beneficial for the school, and to help them get the funds and support they needed to implement their own plans. He put it very succinctly: "Hire good people, make sure they've got what they need, and stay out of their way."

Culture of Adventure

Successful schools seemed to have teachers who were always trying new things, always looking for a better way. A 7th grade science teacher had a little museum of failed experiments on the shelves of her room, but she had taken the successes from those boxes to create her curriculum. Her class was performing experiments at lab stations during our observation. All the experiments worked. They were timed well, so that no group of students spent a great deal of time waiting for another to finish. All lab stations related to a single earth science topic. The questions and activities that students completed during their lab work were designed to make the science behind the experiments very explicit, and each lab station was designed to demonstrate a particular concept, with little room for alternate interpretation.

Nearly all teachers told us that they refined their craft as they gained experience, but we saw many who had gone beyond refinement to redefine their methodology in important ways. At Elm Elementary a group of 4th-grade teachers decided to change the way 4th graders were assigned to their classrooms. Now students are ability grouped. Class size is determined by student ability. Low-performing students have the smallest class size because teachers determined that those students required more individual attention. The high-performing class is large, reflecting students' ability to work independently.

No One Magical Solution

Not a single school we visited had "put all their eggs in one basket." The Saxon Phonics program is used alongside whole-language lessons. Accelerated Math is taught across the hall from a mathematics class that stresses problem solving and real life applications, and the same students attend both classes. Students practice writing in all classes, not just language arts. Schools recognize that there is never going to be one program that works for all students. They are instead looking for the right mix of programs to reach the students they have.

SCHOOL STORIES

Hickory County

Hickory County as one of the counties containing a swath of restaurants, malls, motels, and movie theaters that line both sides of one of Kentucky's Interstate highways. The other Hickory County is found off the main drag in little towns that dot the hilly landscape. Yet even these towns are feeling the impact of development as people have begun to look upon them as alternatives to the Cincinnati suburbs.

Hickory County School District

Facilitation and support are primary functions of the Hickory County School District, according to Dr. Harrison, an assistant superintendent who oversees academic support services as well as the district's elementary schools. This idea of "support" rather than the more traditional supervisory role began to take root within the district at about the same time that the reform effort began within the state, she added. Practically speaking, it means that the district serves as a guide to provide "best practices" information rather than mandating certain programs; individual schools have freedom in selecting programs that best meet their needs, she said.

The district also supports its schools and personnel through its instructional leadership program, which trains principals and other leaders within the district. This program began as a long-range strategic plan in about 1994, Dr. Harrison said, when a broad base of teachers, administrators, counselors, and others began meeting to discuss the idea of leadership. Instructional leaders within the Hickory County School District are trained to focus on transformational learning, create a community of learners, and to be involved more in instruction than in management. Now in its sixth year, the program has earned the approval of the state leadership program, Dr. Harrison said.

The district has reorganized its Consolidated Planning process this year to make it more efficient and more timely at both the district and school levels. There are now two complementary groups that report to the Site-Based Decision-Making (SBDM) councils at a school, and they have different areas of oversight. The first group, known as the Curriculum, Instruction, and Assessment (CIA) committee, is responsible for the seven Core Content areas. The second group, known as the Reducing Barriers to Learning (RBTL) committee, is responsible for student support activities that may not be directly connected to classroom instruction, but which nevertheless play an important role in the overall educational process. Examples of these activities might include groups such as School to Work or technology. Each committee, along with its subcommittees (the seven Core Content areas for the CIA committee, for example) meet regularly throughout the year to plan and revise the Consolidated Plan at district and school levels.

A main area of emphasis within the district is reading, both at the elementary and middle school levels. At the elementary level, the district spearheaded efforts to obtain an Early Reading Incentive (ERIC) grant, for which all elementary schools applied. Initially, 5 schools received funding for the first cycle (1999-00 school year) and 1 received funding

later in the school year. During the next cycle of the grant (2000-01 school year), 5 additional schools received funding. The 4-year, \$400,000 grant provides \$25,000 per participating school per year, Dr. Harrison said. Called Reading Intervention, the program targets students in the early elementary grades who neither qualify for special education programs nor other programs under Title I funds. Without such a program, these students would continue to fall farther behind, Dr. Harrison said.

Reading continues to be emphasized at the middle school level. Sixth-grade students, for example, take the STAR reading assessment to determine their reading proficiency. Recent STAR results showed that from 21% to 31% of the district's 6th graders continue to read at one or more grade levels below their current grade, even though the Reading Intervention program is in its seventh year in the district. Dr. Harrison said she initially was concerned that the program was not meeting the needs of those students. Upon further investigation, officials found that only 48% of those low-performing 6th graders have been enrolled in the Hickory County School District since kindergarten. Furthermore, all 6th graders were tested, including those in special education programs or in Title I reading programs who had not necessarily been exposed to the Reading Intervention program as young students. Finally, district officials are viewing the STAR reading assessment as just one of several methods of assessing reading—as a snapshot rather than the sole method. This year, for example, the district began a longitudinal study of 3rd and 4th grade students who had been involved in Reading Intervention and will follow them until they are in the 9th grade, Dr. Harrison said. Early results showed a one-grade-level gain in reading, she added.

Dr. Harrison said the district is proud that it is known as a high-performing district, although it has to use its funds more creatively than in the past. Previously, the district ranked near the "top 10" districts in the state on per-pupil funding; currently, it ranks around Number 45. This change in ranking is due to changes in the way state funds are distributed to school districts as a result of the Kentucky Education Reform Act. However, district funding for student support services (for example, programs such as guidance, school psychologists, and special education) is within the "top 10," she said.

Hickory Elementary School

At the time of our visit in late winter 2001, Hickory Elementary was nearing completion of a massive construction effort that included a new media center, administrative wing, and additional classrooms. This round of construction is the fourth for the school, originally built in the early 1950s. The principal, Ms. Meeks, said that she had been forced to become a construction overseer in addition to her role as instructional leader, and that sometimes her instructional leader role had taken a back seat to construction demands. The remodeling has been difficult for her staff as well, and Ms. Meeks predicted that the school's scores on the Kentucky Core Content Tests would reflect the turmoil that her school has undergone this year. Ms. Meeks said that teachers were given only one weekend to prepare their classrooms for the opening of the school year because it was unclear until almost the last minute whether officials would issue an occupancy permit allowing students into the building. When the permit finally was issued,

her teachers and others from within the district worked nearly around the clock to remove materials from storage, unpack them, and prepare for their students' arrival.

But even though the building was approved for occupancy, major pieces of the construction puzzle still had to come together. The administrative staff shifted location several times during the 2000-01 school year, at one point taking over a corner of the teachers' lounge. Some newly remodeled classrooms still had no electricity for the first few weeks of school, which meant that teachers had to run extension cords to other parts of the building if they wanted to use anything requiring electricity. This meant that those classrooms had no air conditioning during the late summer days that made up the early part of the school year. And because the media center would be closed for most of the school year, school officials had to develop a plan to bus students to the public library in order to check out books. There were no computers for students to use for most of the school year because the computer center had not been finished.

Some of the puzzle pieces had fallen into place by the time we visited—the office was where it was supposed to be and classrooms had electricity once again, although the media center was still being worked on, the computer center was still "down," and the gymnasium floor had been stripped down to its concrete base in preparation for a new surface. For the most part, however, teachers could once again focus on education rather than on construction.

Hickory Elementary has about 565 students; about 3 years ago the school lost approximately 200 students to a new elementary school. About 25 students (4%) are identified as special education students. About 12-13% qualify for free/reduced price lunch. Most of the students at this school are White.

Use of Creative Funding

Ms. Meeks explained that her school chooses to allocate per-pupil funds to best meet students' needs. Although the funds could go toward hiring additional teachers and reducing class size, she said that teachers chose to have larger classes with instructional assistants. Having additional adults in the classroom works better for this school than having smaller classes with just one teacher, she said. The school has also funded additional teaching positions, such as an art teacher and a part-time physical education teacher (in addition to their full-time physical education teacher), by choosing to have larger class sizes.

Educational Initiatives

At the time of our visit, the school was in its first year of the Principles of Learning program, an initiative through the University of Pittsburgh's Institute for Learning, that focuses on nine principles such as having clear expectations for students, developing expectations that are based on content, and holding students to the same performance standards (www.instituteforlearning.org). Although Ms. Meeks said the program is taking "baby steps" this year, she said she is beginning to see early signs of progress being made, such as the development of rubrics in classrooms.

Language Arts/Reading Programs

Emphasis on reading and writing begins literally as soon as students enter Hickory Elementary. In kindergarten, for example, the main goal is to recognize letters and sounds. In 1st grade, students use methods that present both a phonics and a whole language approach to reading because both approaches are necessary, a 1st grade teacher said.

A 4th-grade teacher described how students are introduced to the writing that will culminate in 4th-grade portfolios. Students in primary grades are required to complete one portfolio piece so they will become familiar with the process, she said. In addition, teachers must assign one on-demand question each month according to the school's Consolidated Plan, she said. When portfolios were first required, the 4th-grade teacher said she did not think her students would be able to complete them, but they ended up surprising her by rising to the higher expectations that were demanded of them, she said. Now, Hickory Middle School teachers informally pass on comments that Hickory Elementary students are good writers.

Teachers recognize when students are having problems with reading, and they are able to send them for special help as early as the 1st grade through the Reading Intervention program. Because of the relatively low number of economically disadvantaged students, the school is not eligible for Title I funds. Instead, its Reading Intervention program is 1 of the 10 in the district that is supported through the ERIC grant, according to the school's reading specialist. At Hickory Elementary, the reading specialist supervises an instructional assistant who works directly with students in the Reading Intervention program. The reading specialist works with students who are in need of more assistance than those in the Reading Intervention program. This part of the school's reading program is not included in the ERIC grant; instead, it is supported by the school.

Although Reading Intervention is designed for younger students, 4th- and 5th-grade students who continue to struggle with reading have a program for which they are eligible. This program uses "Great Leaps," a system that uses letter-sound recognition, phrase recognition, and passage reading to build reading fluency rather than comprehension. They work through a series of timed exercises, such as reading a list of words or phrases. Typically, "Great Leaps" students are pulled from their regular classes for 10-15 minutes three times per week. This program is in its first year at Hickory Elementary. The program is inexpensive both in materials and training, according to the teacher in charge. Some high school students assist with the program, earning community service hours in the process.

There is a \$55 fee for the binder of words and phrases, and teachers can be trained in about an hour, she said.

Mathematics Programs

The mathematics classes at Hickory Elementary incorporate Team Accelerated Instruction as part of their program beginning in the 3rd grade. Now in its eighth year at the school, it was introduced to the 3rd grade this year, Ms. Meeks said. TAI math incorporates a series of 13 workbooks that range from beginning addition through pre-Algebra. Students work independently on assignments in class; maintenance homework assures that skills learned in previous books are not forgotten. Ms. Meeks said that it is necessary to supplement this program with additional instruction on time, measurement, money, and problem solving. For this reason, TAI math is not the sole mathematics program at Hickory Elementary. TAI math has a basic facts component in which students must achieve a mastery level on a 3-minute test.

Arts/Humanities

Hickory Elementary takes the Arts/Humanities component of the Kentucky Core Content seriously. As we mentioned previously, Ms. Meeks does not hesitate to shift resources to best meet the needs of her students. With those needs in mind, she was preparing to expand course offerings to include a part-time arts/humanities teacher during the coming school year, and she was quick to show us the new art room, with its pottery kiln, that will be available next year.

The school's music program also helps address the Arts/Humanities curriculum through an approach that ensures each student is exposed to music. Kindergarten through 3rd grade students take music once each week; older students take music twice each week. Students learn about the nine main elements of music and take written tests, including openresponse questions, over the material. This is unusual, according to the music teacher, who also helps cover drama elements in class.

In the 4th grade, students begin their study of instrumental music through learning to play the recorder. Fifth graders have the opportunity to try out for the school chorus, which performs at programs throughout the school year, both within school (PTA meetings, Christmas program) and outside of school (local malls and banquets). In addition, the school puts on an annual talent show, he said.

The music teacher noted the new music facility, which opens directly onto the stage, and new materials which support his program. Some of these materials were purchased by the school's PTA, and they include a new stereo system, band instruments, and chorus risers.

Practical Living

Practical living is assessed at the 5th-grade level as a component of the Kentucky Core Content Tests. Several topics are included under practical living, and Hickory Elementary ensures that they are covered by using several teaching strategies. One way is by involving students in a "mini society" in which they are "paid" for school attendance, good behavior, and work completion, said a 5th-grade teacher who organizes the group. Fifth-grade students also have the opportunity to act as entrepreneurs who set up simple businesses to experience concepts such as supply and demand and marketing. This attention to the economics portion of the practical living component has paid off in good responses on economics questions on the Kentucky Core Content Test, the teacher noted.

The school also works with outside organizations that can reinforce practical living components. For example, the county extension office comes to the school monthly to present lessons to 4th- and 5th-grade students on nutrition, careers, and long-term goals. The Kentucky Department of Fish and Wildlife visits five times per year to teach 5th-grade students about conservation, including gun safety. The school is involved with Junior Achievement, as well, to help students learn about economics and business. The school has a 4H program this year that helps teach skills such as how to run a meeting.

Extended School Services

Hickory Elementary's Extended School Services (ESS) program serves about 60 students who need extra help in order to be successful in the classroom. Typically, teachers refer students, although parents can request that a student take part in ESS, as well. A statefunded program, ESS is especially important to Hickory Elementary, since it does not qualify for extra assistance through the federally funded Title I program because of its low numbers of economically disadvantaged students.

ESS meets for 4 days a week after school, but students generally come for 2 days a week, said the teacher in charge of the program. In addition to paid teachers and instructional assistants, the program also uses high school students, some of whom volunteer and some of whom are paid. ESS assistance focuses on reading, mathematics, and writing.

Hickory Middle School

Hickory Middle School was completed in the late 1980s. The school has a new principal this year, Mr. Rockwell, who previously was the school's assistant principal. The school has approximately 750 students who come from five elementary schools; 20% of the school's population qualifies for free/reduced price lunches. Because of its relatively low number of students who are economically disadvantaged, the school just qualified for a \$33,000 grant with which to establish a Family Resource Center. It also recently received a \$25,000 grant to establish an Extended School Services (ESS) program. Like Hickory Elementary, Hickory Middle is predominately White.

Literacy

Hickory Middle focuses much attention on literacy issues, such as reading and portfolio development. Mr. Rockwell said that about 17% of Hickory Middle students are reading two to three grade levels below where they should be reading, according to results of the STAR reading assessment, which is given three times per year.

The school's reading program has been in its current form for about seven years, according to a reading teacher. Each grade has a different approach, with the 6th grade focusing on developing individual reading skills and the 7th grade, for example, working on open-response questions and core content areas of reading. These include informational, literary, persuasive, and practical/workplace reading.

The school uses peer tutors as a way of helping other students improve their reading. Called "Read and Relax," it trains 10 to 12 peer tutors to work individually with other students using specific reading strategies as the reading teacher rotates from group to group. These strategies include phonics use, modeling reading, and dialoguing about the book they read. Groups meet twice weekly after school, and tutors receive a small stipend.

Writing portfolios begin as early as the 6th grade at Hickory Middle, when students focus on the writing process. In the 7th grade, students take part in a portfolio monitoring process. This involves all teachers and administrators in the school, who meet with several students to conference with them about portfolio entries. For each entry, teachers and students meet one-on-one for 20 minutes on three occasions. In addition, several teachers are available for extra mentoring on portfolios.

Mathematics

The mathematics program at Hickory Middle offers a degree of flexibility in order to meet the needs of all students. At the 8th grade level, for example, there are pre-Algebra classes for "regular" students and Algebra I classes, for which students can earn high school credit. This is a pilot program for which students were identified on the basis of previous accelerated mathematics courses and counselor input. The middle school is taking advantage of its location near a high school by sending a few students to the high school in order to take geometry.

The middle school also participates in the STAR mathematics assessment program, a district initiative. This computerized test indicates the approximate grade level of students based on their performance. Students take pre- and posttests.

Mathematics teachers attempt to individualize instruction by having students take a pre-test before each new unit of study. If students test out of that particular unit, they receive another activity to challenge them.

School Within a School

Hickory Middle's "School Within a School" program is designed to meet the needs of students who are at risk of failing because they have low basic skills in mathematics and/or reading. Students are identified as potentially eligible for the program as early as the 5th grade or later by teacher recommendation or test scores. The self-paced program operates on a pullout plan, with students coming to the classroom during their regular mathematics or reading periods. At the time of our visit, about 22 students were using both the mathematics and reading curricula, with another 17 using only reading and about 18 using only mathematics.

A similar program has been offered for 2 years within the district. An earlier program at Hickory Middle was unsuccessful and it was redesigned and reestablished this year, according to the teacher in charge. The teacher in charge said she evaluates student progress in several ways, such as their self sufficiency in the class (for some students, organizational skills and maintaining focus contributes to their academic problems) or through feedback from teachers who have the students in other courses. It is hoped that students' KCCT scores will rise after having been involved with the "School Within a School" program, as well.

Gifted/Talented Education

Over the past 3 years, Hickory Middle changed the way it meets the needs of gifted/talented students. Previously, it focused only on academic intelligence, but now it also examines performance in other areas besides the traditional academic areas. The school has a lead teacher who works with regular classroom teachers to help meet the needs of GT students; additionally, these students are pulled out of classes periodically for special programs.

Elm County

Elm County is one of two urban districts in our study. This district stands in sharp contrast to rural districts that typically have a few elementary schools, one or two middle schools, and a single high school.

Elm County Public Schools

The mission statement of the Elm County Public Schools states, "with a commitment to equity and excellence, is to educate all students through effective teaching for learning." The district's goals reflect this mission:

- improving student performance in all content areas,
- making even larger improvements for ethnic minorities, low SES, and special needs students in literacy,
- increasing student impact and learning in the area of technology,
- increasing school safety and improving student behavior, and
- ensuring that all students graduate.

A large district staff is required to address these goals in a district the size of Elm County, with its thousands of students. The Student Achievement division alone, for example, maintains 85 employees, 11 of whom are content staff who support the various academic subjects.

This cadre of instructional support personnel is engaged in helping schools implement a wide variety of initiatives. For example, Dr. Bell, Director of Student Achievement, told us that the district used the Scholastic Reading Inventory (SRI) to gauge students' progress. They give the test three times per year in grades 3, 5, 6, 8, and 9. The test helps schools identify students who are "at risk." Principals meet once per month in the district and their meeting emphasizes using data, SRI scores, or other pertinent topics. Dr. Bell told us that the district was trying to support an open culture of exploration, rather than a negative culture. The district is planning to improve its new-teacher training and develop content coaching for existing staff as part of that culture.

Dr. Bell also discussed her educational philosophies with us. She emphasized the importance of the principal as an instructional leader who is able to diagnose the needs of his or her school and orchestrate cooperative solutions. She also talked about how important it was for teachers to "connect" with their students. To explain the connection, she described teachers who developed relationships with their students rather than those who created barriers between themselves and their students.

Elm Elementary School

Elm Elementary is located in an area of pleasant, middle-class homes. It has about 675 students, 13% of whom qualify for the free/reduced price lunch program.

Elm Elementary is a magnet school with an emphasis on intensive learning. Parents sign contracts agreeing that their children will be at school on time, ready to learn, with their homework completed. The principal, Ms. Garland, explained that when they shifted to the magnet program, there were really no changes in how the school ran. The only change was that they must now do more marketing and advertising about the program and they receive federal funding.

Ms. Garland, the school's third principal in its 40-year history, stated that students and parents are guaranteed 6 hours of instruction each day. To make sure the day starts off on time and focused, every day starts with 1 hour of reading from 7:30 a.m. to 8:30 a.m. By starting with reading, parents and students know that they must arrive on time and ready for the school day. Ms. Garland admitted that because they were an early starting school, some students were tardy initially. Now, however, students know that coming in late means missing part of reading and they are rarely tardy. Parents know that school starts on time and that the students do important work right from the start of school.

Ms. Garland told us that Elm Elementary generally leads the way for other elementary schools in the district. Elm Elementary is one of the top-performing elementary schools in the state. Student and teacher expectations are extremely high. Everything we observed at this school reflected Ms. Garland's statement, "If there is something new that works, (this school) will usually have it first."

No Zero Policy

High expectations start with the school's "no zero policy." This means that no incomplete or below standard work is accepted. Any work that does not meet the standards is reworked until standards are met. Teachers track student progress on redoing assignments. Eliminating zeros, or completing assignments, takes precedence over recess or other activities, and a special after-school session is also regularly held to allow students to complete their assignments. This requires more work from the teachers as they are required to recheck and provide feedback on work that is below standard. The principal related that accountability is big in the state, but teachers and administrators do not live it like those at Elm Elementary.

Behavior Responsibility Management Program

"Responsible behavior," rather than "rules," is taught from the beginning. This program counts on about 90% of the student population self-correcting when asked what they did and what they are going to do about it. By doing so, students establish what constitutes responsible behavior for any situation. They are taught to observe appropriate use of physical and air space in the cafeteria/auditorium, for example. By doing this over time, students learn and understand what is meant by "responsible behavior." An emphasis on rules, on the other hand, means that the more rules you make, the more they can break, and the more students will break.

Open Court Phonics

Most primary classes and one low-performing 4th grade class are using Marva Collins' Open Court Phonics program. The primary classes have been using the program about 3 to 4 years, but this is the first year for the 4th grade class. The program provides a variety of activities that combine literature and phonics skills. The goal of the program is get beyond the distractions and mechanics of decoding words so students can focus on reading comprehension.

"DREAM" Team

Every child at Elm Elementary participates in at least one of five DREAM (Drama, Recreational sport [for leadership], Effective communication [expressive writing], Art, and Music) areas. The school runs five different 1-hour classes. Gifted students are identified in each area, because "everyone is gifted at something," according to Ms. Garland. There are about 25 students of similar ages per session. Younger students rotate between the areas, while older students stay in one "gifted" area. Some students refer to it as their "favorite part of school." The school brings in specialists in each area. Recreational sports include archery, golf, karate, and gymnastics and are enhanced through partnerships with area high schools.

Funding Programs

Funding did not appear to be a problem at Elm Elementary. Ms. Garland and other staff members exhibit skill at finding money for the projects they want through alternative funding such as grants or the PTA. Making the school a magnet program is one example. Federal money was available to support magnet schools. The school sought and obtained this federal money to provide more funding for the school without changing the basic nature of the education provided.

School Planners

Each student has a school planner that includes the school's rules and expectations. Students are expected to keep their homework assignments and upcoming tests in their planners. Planners are to be signed regularly by parents to ensure that students and parents have clear expectations of what is expected at school each day.

Summer Work Expectations

The school has a math review workbook that students must complete during the summer before coming back to school. There is required summer reading for all 4th and 5th grade students. These students must read one paperback book and be ready to discuss it when school starts. The student's final report card contains next year's supply list and summer assignments. New students are given this information upon registering. These programs started because parents were asking for material for students to work on during the summer so they would be ready for the next grade. Each grade level developed its own set of summer requirements.

Chestnut County

Chestnut County is located in southeastern Kentucky. Although the county district faces some serious challenges due to high poverty levels and low education, it has made great strides since the beginnings of KERA. It has gone from being declared academically bankrupt in the late 1980s to ranking in the top 20% of Kentucky's school districts in 1995. Chestnut County's enrollment grows each year and is currently more than 4,500 students. The district has built two new schools within the past 5 years and others have been renovated. There are plans to build yet more elementary schools and consolidate some older buildings. The school district offers all-day kindergarten and three schools also have daycare facilities

Chestnut County School District

When we first contacted Ms. McDonald, the Assistant Superintendent for Instruction, she told us about some of the challenges associated with education in Chestnut County. About 83% of students in Chestnut County receive free or reduced-price lunch. Only about 30% of parents in the county have high school diplomas (according to a survey conducted in the mid-1990s). Many parents can't help their children with schoolwork once they are past the 5th or 6th grades. The parents are embarrassed by their lack of education, but are too proud to correct it. The district is trying to get more parents into GED programs, but projects designed to educate parents are difficult to implement in Eastern Kentucky because of the Appalachian culture, Ms. McDonald said.

Ms. McDonald attributes much of the recent success of schools in Chestnut County to the Core Knowledge program. Both schools we visited in the county participated in the program, which was funded through a Goals 2000 grant. The stipulations of the grant required that the district choose a program from a list of school reform initiatives. The district had identified curriculum alignment as a priority and Core Knowledge included a heavy curriculum alignment component. The only difficulty was that Core Knowledge contained its own curriculum and the district wanted to align according to Kentucky's Core Content for Assessment. To get around that problem, a crosswalk between the two curriculums was established and a curriculum alignment plan was designed to accommodate both. In most cases the two were similar since both were designed with an eye toward national standards.

Chestnut County has established Grade Level Academies to design exit criteria for each grade and subject. Pilot exit criteria are in place currently for grades K-6. The academies will work on grades 7 and 8 this year to be in place within 2 years. They are refining the K-6 criteria this year as well. Project goals include setting high but reasonable expectations for each grade and eliminating what Ms. McDonald referred to as the "blame game." High school teachers often blame the middle school for poor student performance, while the middle school blames the elementary school, and the elementary school blames the pre-school or parents. Exit criteria would ensure that students arrive at each grade having demonstrated an established level of competence and preparation. Ms. McDonald

said that teachers must stop playing the "blame game," take the students at the level they happened to be, and bring them up at least one grade level.

Like most districts, Chestnut County has several programs in place to improve student literacy. The most pervasive is the Accelerated Reading program, which is district-wide. It began 5 years ago at the middle school and became district-wide 3 years ago. The district has seen big increases in the number of books students read. Ms. McDonald gives much of the credit to a recent jump in reading test scores to the program as well. The district has adopted a Scott-Forsman reading series primarily because it is aligned with the Accelerated Reading program.

The district also has several programs in place for struggling readers. Reading Recovery is being used in two elementary schools in the district. It is funded through Title 1 and is a very expensive program (about \$18,000 per teacher for the initial year). Reading Recovery is for the lowest 20% of 1st graders and provides one-on-one instruction with a trained reading teacher. The program is described as "worth the cost because it will cut down on special education referrals caused by students simply getting behind." A similar program is being tried at one school in the district. The Early Intervention in Reading (EIR) program is run much like Reading Recovery, but involves small groups of students in a classroom instead of one-on-one instruction. The program is in its first year, but early comments have been very positive. The district also uses Breakthrough to Literacy at one elementary school and has just completed an early reading grant proposal to fund program expansion because of strong gains at the school.

The district has several programs designed to get more parents and community members involved with the schools. The Adopt a Grandparent program recruits retired persons to come into the schools and serve as teachers' aides. The program is funded through the Save the Children. The district also operates the Parents As Volunteer Educators (PAVE) program, through which parents volunteer at their children's school. The program had about 600 volunteers last year, 150 of whom attended a banquet held in their honor. The district sponsors a program to help parents get their GED on the Internet and Project Even Start, a family literacy program that serves about 50 families each year.

Chestnut County, with the help of the Appalachian Rural Systemic Initiative (ARSI), has also created an innovative new science program. A science teacher now rotates among schools to assist with laboratory opportunities and team-teaches with other science teachers in the district. ARSI also has a science and mathematics resource person who operates a butterfly tagging program and holds an astronomy night at the middle school.

The district focuses much of its attention on language arts and mathematics. Ms. McDonald and another representative from the district office expressed concerns that Kentucky may be testing too much content. They explained that if students could do mathematics, reading, and writing that they would be able to also do science and social studies. They also said they would like to see the state establish exit criteria for each grade level. They explained that the system might have let early grades down because

some teachers thought accountability started in the 4th grade. The system of accountability they envision is based on the Texas system and includes testing fewer subjects more often and reporting at the classroom or teacher level instead of the school level.

Chestnut Elementary School

Chestnut Elementary is located in a small rural community in the county. The original section of the building was built in the late 1930s, with another section added in the late 1960s. Mrs. Walsh, the principal, describes the building itself as one of the barriers that must be overcome for the school to be successful. Aside from issues regarding its age, the gymnasium dominates the older section of the building. Classrooms surround it and the noise from the gym can be very distracting during classes. The school also includes an external mobile unit for pre-school.

Mrs. Walsh told us about other barriers to education at the school, as well. Many students are impoverished, with 85% receiving free lunch and another 3% receiving reduced-price lunch. She explained that many parents in the area did not value education, and did not want their children to be assigned homework. She told us that drug problems are common in this area and that some former students were now in prison. Mrs. Walsh said that she tried to remind her teachers every day of a quote from a former professor who said, "If we knew what these kids went through, we'd thank them for showing up." Yet, despite all these seemingly unconquerable obstacles, Mrs. Walsh takes pride in the fact that of all the schools in the county, Chestnut Elementary is the only one never to be in decline. Its test scores have steadily risen and are comparable to most suburban public schools in Kentucky.

How does Chestnut Elementary manage to improve in spite of these obstacles? Mrs. Walsh starts by making sure that her teachers understand that many of their students come from "horrible homes." She strives to have all teachers understand that this school is very likely "the cleanest, nicest place, the most secure environment, with the best food many of the children have ever seen." The school stresses praising children and rewarding them for what they do. Mrs. Walsh wrote a character education program in 1994-95 and defines a "character trait of the day" during the morning announcements. The program was originally started to combat the school's discipline problem. She told us that the largest trophy the school presents each year is the Character Education Trophy. Mrs. Walsh summed up her education philosophy by saying "No one cares how much you know, until they know how much you care." She said that her school "…is blessed to have strong, qualified, caring teachers."

Focus on Literacy

Like all schools in the Chestnut County district, Chestnut Elementary uses the Accelerated Reading program. Students receive Accelerated Reading grades on their report cards and have designated reading time set aside every day. One 2nd-grade teacher told us that she expected students to read two books per day. A 3rd grade teacher told us that the program really motivated students because they used the computer and because they earned points toward prizes supplied through the program. Students in the 3rd-grade class were very animated during reading time, clamoring for computer time at one of the three computers in the classroom. Students would often cover the screen with their hands when they finished a test and then peek at their score privately. When they got all the questions correct, they'd exclaim, "I got a hundred!" and quickly write their scores in their reading logs. Students in the class were reading at widely differing levels. One student who was reading a Beverly Cleary novel took time out to help a struggling student during class. Collaboration among students was common. The Accelerated Reading program is 4 years old at Chestnut Elementary. It is also used to fill time for students who finish assignments early.

Chestnut Elementary also has a Title 1 Reading program. Students are pulled out of regular classes to work on reading and writing. The teacher in charge of the program says they work on anything the regular teachers say they need. She said that she was "willing to do whatever it takes." She also helps run an after-school reading program with high-school students serving as reading coaches paid through ESS funds. She says that the program targets 3rd graders, but will take 2nd graders if there is room.

Reading Recovery is a new program at Chestnut Elementary. It is for 1st graders, and only for those scoring in the lowest 20% on a reading assessment. The program consists of 30 minutes of one-on-one instruction each day for 20 weeks. After 20 weeks, students are either tested out of the program or placed in some other remedial reading program. To test out of the program, the student must score at or above the 50th percentile for her class. It is important to note that this program is not a special education class, but rather an early intervention class. The teacher running the program explained, "Earlier intervention is easier than late." The program is designed to keep students from falling further behind. The program has enjoyed some success in its initial year. Two students have already tested out and one student, thought by many of his teachers to be headed for special education, is now in the top reading group in his class. Mrs. Walsh told us that one of the benefits of the program is that it could keep some students from ever needing special education.

The Reading Recovery program is taught in a teacher's office, a converted storeroom beside the stage in the gym. Each lesson consists of the student reporting on homework, which always requires the student to read to a parent or guardian. The student then selects a book to read aloud. Once the book is finished, the teacher selects a book that stretches the student's current reading level. Once the student reads the second book aloud, the book is placed with the student's things and is to be taken home and read again. The student then reads words spelled with magnetic letters and alters the letters to form other

words. When that activity is completed, the student writes her own story (usually only one sentence long). The sentence is corrected and cut into individual syllables to be reconstructed as homework. Finally, the student reads another book aloud and is returned to class. The program uses aspects of whole language and phonics.

Reading Recovery is an expensive program. In addition to the required one-on-one time, there is a large training component for the program. The teacher attends training in a town about 40 miles away, once per week. Four times per year she takes a student and a parent to training so that she can demonstrate her skills for her classmates and receive feedback. She also attended 1 week of initial training last summer in that town prior to starting the program. Currently the program is only taught for half of each day. The teacher also teaches literacy groups as part of Title 1. She hopes the program can be expanded to a full day next year, since so much of the program costs are incurred during the first year.

The focus on literacy can also be seen in Chestnut Elementary's pull-out special needs class. Each class period consists of two language arts lessons, one mathematics lesson, and Accelerated Reading time. There are 15 students pulled out for the program for 1 hour each day. Each class contains from two to four students.

Other Academic Programs

There are some recurring themes from the courses we observed at Chestnut Elementary. First, most classes included some form of incentive to keep students on-task and to reward diligence and good behavior. Second, most of the classes we observed were designed to accommodate students of different ability levels. Third, most of the teachers we observed tried to design lessons to access several different learning styles.

For example, one 4th-grade teacher told us that her science class was designed around the DWOK (Different Ways of Knowing) principles. Another teacher allowed us to observe a class that consisted of students learning about Newton's Laws of Motion by actually causing toy vehicles to crash. She also conducted a class discussion on the importance of seatbelts. A 5th-grade social studies teacher has students present projects to each other and videotapes the presentation. We observed presentations ranging from poster presentations and skits, to model-building or composing and singing a song based on the historical period being studied. A kindergarten teacher was quick to point out that kindergarten had changed, and that now students were expected to read and do mathematics in kindergarten. She used the increased rigor of the kindergarten curriculum to motivate her students, telling them "You're all so smart, you can do 1st-grade work." She also fostered cooperation and collaboration in her class. "Why are we so successful in kindergarten? Because we help each other out, that's why." And finally, she made sure that each student had success. The day's lesson was a phonics bingo game, but it was played until all students "won" by completing their card.

Community Involvement

Chestnut Elementary does not have the kind of parental support found at many Kentucky schools. However, they do participate in the PAVE program, and have had the Parent Volunteer of the Year each year since the program has been in place. Mrs. Walsh told us a story about a parent who learned to read while volunteering at the school. They also participate in the Adopt a Grandparent program and have retired persons serving as teacher's aides in the building. The teachers are quick to call upon their own resources as well. One teacher explained that she was able to recruit a skilled high-school reading coach because her mother worked in the building. The Reading Recovery teacher requires that parents sign a homework completion form each day for their children and other teachers have begun to require students to get parental signatures as a means of increasing the involvement of parents in education.

Chestnut County Middle School

Chestnut County Middle School is located near the county seat on a campus that also contains the high school and an elementary school. All students from the county's elementary schools attend one centralized middle school. Chestnut County Middle serves nearly 700 students in the 7th and 8th grades.

Last year Chestnut County Middle spent a great deal of time working with Core Knowledge, but according to Principal Morrison, it has fallen out of favor this year. The grant that funded Core Knowledge has run out. Mr. Morrison told us that the curriculum from Core Knowledge might be better than Core Content because of its strong focus on higher order thinking. Remnants of the program remain in many classes we observed and it is evident in some of the materials still posted on the classroom walls.

Focus on Literacy

Accelerated Reading is as prominent at the middle school as at Chestnut Elementary. Prior to starting the Accelerated Reader program, the library checked out about 8,000 books per year. The first year of the program, that number jumped to more than 60,000. Nearly every classroom has a computer with the Accelerated Reading software installed. The middle school has adapted the program to serve a second purpose, however. They call this new adaptation Reading Recovery, but it is not the same as the Reading Recovery used at the elementary schools. The middle school Reading Recovery was homegrown in Chestnut County.

Reading Recovery was designed to help poor readers catch up to their classmates. To qualify, students must be among the worst 25 (according to the STAR tests) readers in their areas. The school has six areas (three 7th and three 8th grades), each with about 110-120 students. Reading Recovery is taught during the students' regular reading class 4 days per week. The school operates on a six-class-per-day schedule and Reading Recovery is taught for six classes per day, which means all planning for the course is done on Friday, the one day of the week the class isn't taught. The Reading Recovery teachers also supervise the Accelerated Reading program for the entire school, so any work necessary for that must also occur on Friday.

From the 25 students qualified for each class, about 5 attend special education classes during reading time. This leaves each Reading Recovery class with about 20 students. Chestnut County Middle has two reading specialists, both of whom team-teach the reading recovery classes. One teacher told us that since she began teaching "I feel like I'm doing more what I'm qualified for." The program is funded through Title 1 and that teacher has been a Title 1 teacher since 1972. She also explained that both teachers were in the room all day. She said, "One-to-one time is very important for these kids."

Participant students read Accelerated Reading books in Reading Recovery. They may read with other students or by themselves. The teachers encourage students and use esteem-building techniques. Teachers told us that the program eliminated the stigma of selecting low-level books during Accelerated Reading time in regular classes since students in the program all read at a lower-than-typical level. The class is very structured and disciplined, so the students are not allowed to socialize. Reactions of students have been mixed. Some like it while others complain. The regular teachers however, are very supportive. The program effectively reduces their class sizes during reading instruction.

Mr. Morrison also taught the Reading Recovery class during one day of our visit. He explained that he tried to get into all classes, but that this was the first time he had taught Reading Recovery. He began by explaining the program's progress report and told the students that he felt partly responsible for the fact that they had fallen behind in reading. His next message for the students was that it wasn't too late to become a good reader and that the difference between a 5 or 6 on the STAR test and a 13 was a matter of speed and comprehension. He used that argument to persuade the students that they could gain rapidly through practice. The main part of the lesson he taught was from Kentucky Education Commissioner Gene Wilhoit's article (February, 2001) in the *Kentucky Teacher*. From the article he listed the commissioner's recommendations for improving reading and how Chestnut County Middle had met those recommendations. His assignment for the students was to write a letter to the commissioner about the article suggesting a strategy to improve middle school reading.

The emphasis on literacy is evident at the school in other ways. The writing portfolio coordinator told us that the district had begun an initiative to have every student from 4th grade up complete a portfolio. Chestnut Middle's ESS program is designed to help any student in danger of failing in any subject, but as the portfolio due date gets closer, more and more students stay to type portfolios in the school's computer lab.

Focus on Mathematics

When we talked to Mr. Morrison about reading, he told us he hadn't figured out ways of implementing similar programs in mathematics at the school. He did tell us that students who needed the most help in math had already been identified. He is skeptical about Accelerated Math and said that it could not be used in the same ways as Accelerated Reading because it required too much repetition and not enough problem solving. The school does have the Accelerated Math program, but it is used primarily in ESS. He also

explained that he was unwilling to leave any part of the curriculum out during 8th grade in order to double the time students spent in mathematics classes. He said he was "unwilling to give up the continuity of the students' education for the test."

An 8th-grade math teacher told us that Core Knowledge had a very positive impact on her curriculum. She explained that the curriculum from Core Knowledge was much more complex than the curriculum from the Core Content for Assessment. She says she still uses Core Knowledge, but makes sure that each lesson coincides with Core Content. Students in her class who have fallen behind also get some extra assistance from the Science and Math Resource Teacher.

The Science and Math Resource teacher rotates among classes at the middle school and assists regular science and mathematics teachers. His position is new this year and is funded in part through Title 1 and in part through the district. In science classes he usually helps run a laboratory or hands-on experience and serves the entire class. In mathematics he often pulls out low-performing students and works with them in small groups on math basics. He uses computers more in math and gives students more individual attention. He gets to each teacher once about every 3 weeks. We interviewed two teachers whose classes he assists with regularly, and their only complaint was that he wasn't available more often.

Parent Involvement

Chestnut County Middle has a parent liaison on staff. The parent liaison is not a teaching position, but was filled by a former instructional assistant. Her duties include contacting parents when students are in trouble, as well as arranging for parent/teacher conferences, signing parents up for the PAVE program, and serving as a public relations person and photographer for the district newspaper. She also contacts local newspapers and gives them pertinent information about the school. Her long- and short-term plans are to get more parents into the school. She explained that it was very tough to convince parents that they are needed at the middle school. Kids may not want their parents at the school, so many don't want to come. The parent liaison, however, says that she has seen the positive difference having parents in the school can make on kids' lives.

In addition, teachers in the building have telephones in their rooms and are encouraged to use them to call parents. The 8th-grade math teacher said that a quick call to a parent could be a very powerful discipline tool. She said that she used her cell phone to call parents before the room phones were installed.

Vice-Principals

Chestnut County Middle has two vice-principals, one of whom is responsible for the 7th grade and one for the 8th grade. The innovative aspect of this arrangement is that next year they will switch the grade for which they are responsible. This way each vice-principal follows students from the 7th to the 8th grade before getting a new group of students. In order to accomplish this they must also switch offices and move all materials for the students each year, since one vice-principal's office is in the 7th-grade section of the building and the other in the 8th-grade section. Both vice-principals told us that getting to know the students better offsets the inconvenience.

Other Programs

All 8th-grade students take a 6-week course in career education culminating with a career plan that can be used to help schedule classes at the high school. Many 8th-grade students also take a semester-long technology class during which they explore the software applications available at the school. They are responsible for updating the school's web page and one student is even designing web pages for local businesses. Seventh-grade students all take a 9-week keyboarding course.

Chestnut County Middle also has an innovative program in social studies using History Alive. However, because History Alive doesn't include all aspects of the Core Content (for instance, it doesn't include economics), the teacher has supplemented the program. She uses web materials or scans pictures to make her lessons more interesting. She has developed a Jeopardy game using Microsoft PowerPoint for reviewing factual information and has demonstrated PowerPoint as a teaching tool to her peers.

In addition, the school operates a yearly science fair. All students are required to complete a science fair project. The school sponsors both a varsity and junior varsity academic team. They are planning a "mystery day" later in the year in which students will use evidence to solve mock crimes. Next year they will also likely participate in a history fair being sponsored by a local college, which also helps operate a mentoring program funded through the Knight Foundation. College students work with 7th-9th grade students of average ability who are identified as at-risk. The goal of the program is to encourage those students to attend college. Mr. Morrison told us that the school "was continually looking for new methods to succeed."

Oak County

Oak County is located in western Kentucky. The county also contains a strong agricultural and manufacturing economy. Both Oak Elementary and Oak Middle School are located very near the county seat, and are part of the county school system. The county seat also contains a city school system with elementary, middle, and high schools of its own.

Oak County School District

The Oak County school district contains three elementary schools that feed into one middle school and one high school. The district office, the middle school, and the high school all share a campus. We interviewed Mr. Shepherd and Ms. Stillwell, elementary and secondary instructional supervisors, to understand the programs and goals of the district. We conducted a follow-up interview with Superintendent Richardson for a more in-depth discussion of the district's plans for a value-added accountability system.

The most comprehensive program the district is working on currently is the Standards Project 2005. The program focuses on academics, behavior, and productivity, and seeks to increase alignment efforts, both vertical and horizontal, for grades P-12. The program was started as a part of Ten Sigma, which was implemented in Oak County in 1997-98. It includes a strong emphasis on performance assessments with rubrics that give students a clear understanding of expectations. Standards Project 2005 began by involving teachers from each school in the district in a standards-setting process. The teachers used Kentucky's Core Content, Program of Studies (KDE, 1998), and the subject area national standards as guides for the process. They then arranged the curricular topics on a twodimensional grid, with sequential versus non-sequential and concrete versus abstract as the axes and divided them by grade and subject. In this way, the district set clear expectations for schools and teachers as well as the students and limited redundancy in the curriculum. The process began at the elementary schools and focused on the four main content strands of literacy, mathematics, science, and social studies. The teachers also looked at arts and humanities and practical living/vocational studies, but concentrated on the other four subjects.

In order to accomplish its goals, Oak County School District had to obtain considerable commitment from schools. First, schools had to agree to implement the project for five years before moving to something else. Second, they had to agree to increase the number of mandatory professional development days for teachers to four. They also had to agree to a much more focused approach to professional development. Ms. Stillwell described the professional development teachers received in the past as "good, but varied." Now, professional development is tied directly to implementing the curriculum and the standards within the schools. Teachers provide input for professional development at work-sessions with consultants. The teachers then implement the projects that grow from the work sessions and follow up by presenting those projects during future professional development. In addition, teachers and students present at school board meetings, allowing the board to recognize the them for their good work, and serving to remind the board members not to forget the curriculum.

Oak County is also planning to implement a value-added system of accountability. The district has adopted William Sanders' plan for holding teachers and students accountable through yearly testing and analyses. Dr. Sanders conducted a value-added workshop for teachers in January 2001. Superintendent Richardson explained that the board didn't feel that the state accountability and testing system (a school-level system) was providing enough information about progress at the student and classroom levels. The system will use data collected from the CAT test for kindergarten students and CTBS/5 Terra Nova for other grades. Once three years' worth of data has been collected, the district will look for trends. Teachers who are below average in terms of student growth will be offered assistance. Superintendent Richardson said that he believes all teachers want to teach effectively, but some may not know they aren't as effective as they could be. He thinks that teacher-level data will help. The teachers will also receive the data via CTB's Report Mate Clarity computer program, which can be used to disaggregate the data in various ways.

Another district-wide strength in Oak County is the support given to the use of technology in education. In fact, the district supported a professional development session last summer in which teachers assembled their own replacement computers and practiced with new software. They'll follow up with presentations at faculty meetings.

This district benefits greatly from its proximity to a state university. In addition to providing a continual influx of student teachers, the university also allows schools to use its facilities such as a museum and an art gallery. We heard about participation in several events scheduled at the university, including choir, art teachers collaborating with university professors, and a speech pathology cooperative program in the middle school. High school vocational classes are often taught on the university campus. The university also uses the schools as laboratories for projects requiring students. We observed university professors at the middle school participating in a federally funded technology program. The other big advantage to having the university next door is that it is convenient for teacher to continue their education. According to the curriculum supervisors, 78% of Oak County teachers have master's degrees.

A recurring theme during our interviews was that the district tries to empower teachers and schools. The district personnel feel privileged to have the teachers they have and those teachers are trusted to make decisions. Ms. Stillwell and Mr. Shepherd explained that the district was fortunate also to have very strong building leaders who made student learning and achievement their first priorities. They also described a joint SBDM meeting between all the district's schools that occurs at the beginning of every year. Funding for the schools is discussed openly at these meetings and the needs of each school can be considered against the conditions of all the others. They described a recent instance when both the high school and the middle school donated monies to elementary schools to meet their needs. Ms. Stillwell and Mr. Shepherd told us that the upper grade level schools know that, "Those will be our students later." They also told us that the district had always sent teachers to national conferences as a method of empowering teachers and promoting leadership.

Oak Elementary School

Oak Elementary was built during the era when open classrooms were popular. Many rooms in this school are actually four separate pods, once all one room, now separated by room dividers to create smaller individual classrooms. Because of the way the school is designed, each classroom is probably smaller than average, and storage space is limited. Students from one classroom often must skirt another to get into the main corridors of the school. This may sound like it would be disruptive, but that aspect was not observed at Oak Elementary. Teachers accommodate their "pod-mates" and still manage to teach high energy classes without disturbing those around them.

When we interviewed Ms. Ellis, the principal, she explained the process used to adopt programs at the school. When a request is made to start a program at the school, it is taken to the Parent Teacher Organization and the SBDM Council. They consider the value of the experience (if the request is for professional development) or the program. They look at all the requests, the funding that is available, and the priorities of the school. "We try and do as much as we can with what we have."

For instance, the school adopted the Saxon Phonics Program this year for kindergarten classes. "We knew we had to reach kids early, and we knew that there were some kids we were not reaching." Ms. Ellis said that they knew that there were some students for whom phonics was not the best way to teach reading. For many students who were falling behind, combining this phonics program with a whole language approach has really made a difference. Because of its success, she said that the school would find a way to continue funding it. She hopes that Saxon Phonics will be added to the "textbook bid list." The school stresses reading and has many reading programs. Ms. Ellis said that if the students couldn't read, then they aren't going to have success in other things. "If you can read and do math, then you'll be able to do social studies and science," she noted.

Accelerated Reading

Oak Elementary has adopted the Accelerated Reading program and the STAR reading tests that accompany it. It's been in place at the school for about four years and permeates the school environment. Students who have read a large number of books have their pictures posted in the halls. There is a trophy that rotates among classrooms for Accelerated Reading. Time is set aside for reading rather than using the program only to fill the gaps between assignments. Each week an announcement is made congratulating the classroom that read the most books for the week. The students cheer and shout when their classroom wins. Students brag, both in and out of school, about their reading level and the number of books they've read.

The students and teachers at Oak Elementary are not satisfied with reading a large number of books, however. They also strive for a high, but not too high, comprehension average. One teacher explained that if a student consistently got all perfect scores on the comprehension tests, they pushed that student to read more difficult books. They want each

students to have an average score of between 85% and 90% on the tests. That way the students are stretching their ability at the same time they increase their raw numbers. The school also uses the STAR data to consider reading growth. That same teacher told us that the average student gain during a year using the Accelerated Reading program was about 1.5 grade levels. Some students gain much more than that, but nearly all gain at least one grade level.

Student Expectations

Ms. Ellis told us that she was happy to have done well during the last round of testing. However, she takes that news with a grain of salt, stating, "It's nice to be good, but good eventually becomes mediocre." She tries to foster an atmosphere of experimentation and learning among the teachers of the building. It's OK to try something, even if it doesn't work. She explained that the school had a few teachers who were set in their ways, but that it also had some who were willing to be flexible and experiment. They in turn spread their successes throughout the rest of the faculty. The atmosphere of experimentation is tempered by the common curriculum, but teachers are given considerable latitude regarding how they get students to meet their standards. She said technology had helped spread excitement to teachers and that Ten Sigma and Standards 2005 had really motivated some teachers at the school.

Perhaps more important, Ten Sigma and Standards 2005 have motivated students. They responded well to the rubrics because they knew exactly what was expected of them. Four girls in one class became so excited about doing a report that contained a video that they voluntarily did another one. They'll be presenting their report to the school board later this year.

Title 1 Program

Oak Elementary recently qualified for school-wide Title 1 programs. In the past, Title 1 programs were targeted and could only serve economically disadvantaged children. Being named school-wide Title 1 means that the school can use that funding to serve the entire student body. Two teachers are designated as Title 1 teachers, and both focus on literacy. One works with K-3 students, the other with grades 4 and 5. In K-3, all students participate in a writing program. Struggling readers also participate in a separate reading program. Students use a game called Lightspan, a skill and drill computer program. Many struggling readers also participate in a program called America Reads, a federal program that pays for two university students to assist with reading instruction for 12 hours per week. Twenty students in each of grades 1-3 participate in the program for about 30 minutes per week. It is a pull out program that occurs during the class's regular reading time, so the students who participate don't miss other instruction. The remainder of the cost of the program is funded through Title 1.

The 4th- and 5th-graders have a Title 1 instructor as well. She runs the school's writing laboratory. All students participate in the program, but 4th-graders get more time in the lab because of portfolio requirements. The lab itself is set up with tables and laptop

KDE/HumRRO 49 June 2001 Draft computers. Students are given a great deal of freedom when they write. They work in various parts of the room, ask each other for guidance and editing help, and may choose to lie on the floor rather than sit in a chair.

Oak Elementary just meets the minimum qualifications for school-wide Title 1. Next year that may not be true. A small shift in the student population and the funding for these programs may become dramatically reduced and stipulations about who receives services may be imposed. The school would still receive some Title 1 funding, but because of regulations, only students identified as economically disadvantaged could benefit from it. That would mean that only pull-out programs would be conducted using those funds, and a major shift in terms of the way the programs are run. The faculty and staff are hopeful that the school will retain its Title 1 status and that the programs will continue.

Focus on Literacy

The programs listed previously are indicative of the attention Oak Elementary gives reading and writing in the everyday curriculum. They put forth a coordinated effort from kindergarten through 5th grade. All students complete portfolio entries, including kindergartners. The school produces a literary magazine called Doodles each year that contains writings from students and staff. The staff at Oak Elementary models reading and writing. We observed teachers reading during reading time and writing their own poems during writing labs.

Other Programs

Oak Elementary chose to showcase several other programs during our visit. The school's music program is taught in its own dedicated classroom and all students participate. The program incorporates singing, movement, and playing instruments. All students also take part in the school's art program. In addition to creating art projects and learning art vocabulary, the students are exposed to art criticism and history as well.

In addition to specific programs, Oak Elementary's mathematics, science, and social studies courses have all been influenced by Standards 2005, and Ten Sigma before that. Courses at Oak Elementary included many opportunities for using manipulatives, performing laboratory experiments, and doing long-term projects. Students present their work to each other regularly and are taught to be supportive of each other's efforts, even when the students are criticizing or helping improve an assignment.

One of the most notable courses taught at Oak Elementary is kindergarten. Ms. Ellis made sure that both researchers had the opportunity to interview a kindergarten teacher and observe a class. Kindergarten is an important academic year at this school. It is taught for a full day and students are expected to read and write do basic mathematics by the time they reach the end of the course.

Oak County Middle School

Mr. Montgomery, Oak Middle's principal, told us that the school emphasizes standards, technology, and collaboration. The emphasis on technology can be seen entering any classroom and especially if you visit the school's media center. Most schools call their library a media center these days, but Oak Middle School's media center is worthy of the name. It contains enough dedicated computer desks with up-to-date networked computers for an entire class to share a lesson, and for each student to have his or her own computer workstation. It is an impressive system to see, and is even more impressive when a class is using it.

While the emphasis on collaboration is not as visibly obvious at Oak Middle, it becomes clear after talking to some of the staff. The school building itself is designed with three distinct halls connected by a common hall with offices, a gymnasium, and a cafeteria in a separate section. The three halls each house one of the three grades taught at the school. This puts common grade-level teachers near each other. As recently as last year, those grade level teachers were further divided into teams. The teams were eliminated this year for a variety of reasons, including perceptions of parents that one team might be stronger than the other and to facilitate the phasing in of common standards from Standards Project 2005. The middle school family concept has been put on hold to allow same-subject teachers to work more closely together on curriculum alignment. Once curriculum alignment becomes stronger and students receive much the same assignments irrespective of which teacher they happen to get, parents' concerns about the strength of the teams should be ameliorated. The family concept is popular with teachers and is valued at Oak Middle, however, so teams will be reconstituted in the coming academic year.

Oak's emphasis on standards is harder to observe, but is no less an important aspect of the school. Mr. Montgomery explained that the focus of the school was the bottom-line of what the students could do whenever they leave the program. He further explained that he hired new teachers who "think in terms of standards and high expectations, because when the door closes, they will do what they want to do." All newly hired teachers at the school receive only a one-year commitment. If they don't work out, their contract is simply not extended. Mr. Montgomery also told us that the university provided an excellent pool of teachers from which to choose and high expectations were common among teachers in the area.

Learning Environment

Several teachers told us that the learning environment of the school had not always been conducive to high academic expectations. One teacher remembered a "school out of control." She explained that misbehavior, vandalism, and even violence were once common among students at Oak Middle. Mr. Montgomery told us something of the extent of the discipline problem when he arrived. The school doled out "nearly 200 suspension days and filed charges when needed." It is difficult to imagine these problems at Oak now.

Mr. Montgomery credits much of the schools' current academic climate to a building renovation that took place shortly after his arrival. The building was updated in terms of its capacity for technology with high speed internet access in almost all parts of the school, but it was also updated aesthetically. In addition to a fresh coat of softer colored paint, the walls of Oak Middle now have framed art prints. They are in all common areas of the school, including the restrooms. The prints are grouped by thematic period and most have a brief history or explanation of their significance on a card beneath them. Oak gave the students a facility in which they could take pride in the hopes that it would extend to the school itself and positively affect behavior. Evidently, the strategy worked. The artwork has not been vandalized and the students are described as well disciplined. An added bonus is that the artwork may influence students' scores on the arts and humanities portion of the Kentucky Core Content Test.

Students Using Technology

Teachers at Oak Middle are very proud of the fact that students regularly use technology. We heard from several teachers who are involved with technological programs within the school, some of whom are learning along with their students. One teacher who describes herself as "not a techie at all" helps operate the Gen YES (Generation Youth and Educators Succeeding) program. The program is in its second year and is funded through a federal PT³ (Preparing Tomorrow's Teachers to use Technology) grant. The teachers who work with Gen YES students run the program during their planning time. Until this semester, the program was run after school for 2 days per week. The teacher was very positive about the support of the school's administration and the support of university faculty, who wrote the grant to start the program at Oak Middle.

Students participating in Gen YES were chosen based on their interest in technology. Typically they are the better students in the school, but that is not always the case. Two classes of 10 to 12 students, one in 7th grade the other in 8th, participate in the program, which lasts for one semester. The program calls for the students to produce a technological product that will benefit the school, and particularly a collaborating teacher for whom they are designing the product. The projects must assist the collaborating teacher with some aspect of their curriculum (may be content or a technical educational tool) and must link to Kentucky's Core Content. Each project is proposed to a consulting group located in Washington. If it is not approved, the project must be resubmitted and changed according to the consulting group's suggestions. Once approved, the projects are completed and demonstrated before being turned over to the collaborating teacher.

Examples of projects include a science class web-site, an interactive food pyramid, an electronic pen pal project with students from Japan, Australia, and New York City, a game based on the television show "Who Wants to Be a Millionaire," and an internet music library for use in a projected movement and dance course. One student is presenting her project in Louisville at a state-level technical conference this year.

This program is two years old at Oak and in its last year of funding. The university professors planned to file for an extension, but PT³ lost its federal funding and additional funding for the program seems unlikely. The teachers say they will continue the program irrespective of whether the funding runs out. They plan to lose the services of the consulting group, but have already begun planning to handle that aspect of the program inhouse. Expansion of the program is unlikely, especially without grant support.

In addition, Oak Middle has strong ties to the National Air and Space Administration (NASA). After attending a conference held by NASA, the principal and staff have implemented several aspects of the conference to stretch the technological training available at the school. The gifted and talented program at the school incorporates a NASA-related engineering project. One student in the program placed third in a national competition for designing the interior of an airplane. The students are familiar with global positioning equipment, flight simulators, and a variety of other technical equipment. Mr. Montgomery said he would like to see aspects of the gifted and talented program implemented school-wide. The goals of these projects are to give students more than a typical middle school education. Oak is trying to anticipate the skills and education that will be necessary for success in the future of its students.

Focus on Literacy

The focus on literacy that was so prevalent at Oak Elementary is continued at Oak Middle School. A 6th- grade science teacher told us that the goals of her science program included introducing students to laboratories and writing about science. Accelerated Reading is continued at the middle school and is an important part of the curriculum. Students are expected to read at least three books per nine weeks and receive an Accelerated Reading grade on their report cards. The school has also spread responsibility for completing portfolios among all the language arts teachers. Previously 7th-grade teachers handled it. Now each teacher is responsible for ensuring that about 30 students complete portfolios. There is a school-wide priority to improve student writing.

Supported by funds from a local retail store, the 8th grade language arts teachers make the arts and humanities a natural extension of this literary emphasis with literature and drama being significant portions of the curriculum. Students do not just give reports in these classes, they do monologues and use dance movements to create interest or emphasis. Presentation is an important part of writing here.

Youth Extension Services

Youth Extension Services (YES) was started in 1993 with about 125 students. It was extended to include all 8th graders in the 94-95 academic year. The school uses a career interest inventory to help select service opportunities in the local community for student participants. The school then provides buses to take students to their volunteer jobs in the local community. Students can volunteer at a local nursing home, one of the elementary schools, or other local businesses. The program tries to make each experience as much like a real job as possible. Employers complete a performance evaluation for each participating student, and can even fire students for not following guidelines.

The program is supported by the school board, which provides insurance for the student participants at no cost to the employers. The school administration supports the program by allowing 8th grade students to participate for one day per month during school hours. Student volunteers previously were out of school every Friday, but that was determined to be too much time away from school. Parents support the program by doing much of the footwork to get the students jobs in the community. They may help with transportation. Parents also handle complaints.

The program isn't perfect. There have been a few firings, and students who are behind academically or who are behavior problems are not allowed to participate. Typically only 18-20 students are left behind on YES days. However, some students have gotten summer jobs from participating in the program and others have been exposed to a variety of work experiences. Students may change jobs several times during a year. Some students the director of the program was concerned would be discipline problems have been very successful in the program. Oak Middle School's YES program has garnered national and even international recognition.

Collaboration and Time Management

A common thread from interviews with nearly all teachers at Oak Middle was that other teachers within the school were responsible for the success of their particular programs. The staff spreads responsibility for programs, for portfolios, and when planning curriculum. They work with other teachers to establish common culminating performance events for unit teaching to ensure that curriculum alignment is more than a list of topics to be covered by each grade. They regularly question why they teach the things they teach in the ways they teach them and experiment with new techniques, borrowing from each other regularly. One teacher explained that having a student from the university in her classroom really made her question the way she did things.

The other common idea was that good teaching and successful program implementation takes time. Teachers described programs run during their planning periods, laboratory preparations for large groups of students, using their own time to learn the newest technology for their classes, and even learning about technology from students. As one teacher explained, effective lessons require a lot of resources and you need to come at the topic from a variety of different ways. She told us that she tried to hit as many learning styles as possible with each topic from her curriculum. That means that all topics include some sort of hands-on activity or project, and that takes a lot of time to prepare and

to implement. She explained further that projects were important for students because they stretched them beyond their comfort zone. There was considerable evidence to support Mr. Montgomery's statement that the school could be characterized by "high expectations and a great faculty who will work with students."

Sycamore

Sycamore is one of the larger incorporated communities in Kentucky. And with that ranking comes some of the issues more typically associated with Lexington-Fayette County and Louisville, the largest and second-largest cities, respectively, in the state.

One issue is poverty, which is clearly visible when one examines the free/reduced price lunch rates of the city's schools. Three of the district's elementary schools have rates greater than 90%, and at one of them, about 96% of the students qualify for the federally funded program. The district as a whole, however, has a free/reduced rate of 51.8%. To combat the poverty in these areas, Sycamore officials sought and received a designation as an Enterprise Community. This program, funded through grants from the federal government, attempts to assist residents in these areas in several ways. The strategic plan developed by Sycamore officials, for example, specified that assistance would go to economic development, supporting families through improved health care, education efforts aimed at adults as well as children, housing, and crime prevention.

A second issue is diversity. With a large public university, international companies, and a refugee assistance center, it is perhaps not surprising that diversity has been finding its way into the city. In fact, one may hear as many as 18 languages in the district's schools on any given day, according to Dr. Mitchell, the district's superintendent. Many of these students need help in learning English, and about 12% of the student population is placed in English as a Second Language (ESL) programs. In terms of national origin and student ethnicity, the district is one of the most diverse in the state. This is in sharp contrast to more rural areas of Kentucky, where few, if any, minority students can be found.

Sycamore Independent Schools

Because of the issues of poverty and diversity, school officials we spoke to consider the district to function more as an urban rather than a rural or small town district. In fact, one of the changes that have been made since Dr. Mitchell's arrival to the district in 1994 has been the move to a year-round calendar. The old agrarian calendar previously in use meant that the approximately 3,400 students and their teachers were not using time as efficiently as possible, Dr. Mitchell said. In 1997, the district moved to a schedule of four 9-week grading periods with 2-week remediation/enrichment blocks and a 7-week summer break. Students can now be required to attend the remediation sessions, he added. This approach means that the time a student spends in school has become a "variable" rather than a "constant," he said, with some students spending more time in school than others so that they can get the help they need.

Dr. Mitchell implemented other changes, as well. He developed teams of people from within the district to begin the strategic planning process for the district. Together, the nearly 175 people hammered out district goals: reducing the dropout rate to zero; successfully transitioning from high school to higher education or employment; and meeting or exceeding proficiency in core academic areas, including technology. Although the district has not yet met all these goals, Dr. Mitchell said they are getting closer to doing so.

Learning takes precedence over all other activities, he added. The district has increased support staff to assist students and teachers. A new grant writer was hired in 1998, and in the first year brought in more than \$1 million in grants. Four additional school counselors and two additional school psychologists also were hired.

One way the district is attempting to reduce the dropout rate and assist in successful transition to work or higher education involves former students. Sycamore and its neighboring county district have teamed up to create the "Second Opportunity High School," an evening program that was developed to help those who were just a few credits short of graduation. One student, for example, lacked a physical education credit, so counselors arranged for him to return to school for that class. Students can complete about three courses per year in this program, Dr. Mitchell noted. In addition, the district continues to support the General Education Development (GED) program, which he said is geared more toward students who lack many credits.

The district spends from \$500,000 to \$1 million each year in order to bring advanced technology into schools. Three years ago, Dr. Mitchell said, schools were fully wired and optic cable was installed. In addition, the district added a full-time technology coordinator and assistants and created a technology education center for staff. A technology curriculum for kindergarten through 12th grade is also in place.

A school is currently under construction that will replace Sycamore Junior High School, an aging facility that houses the district's 7^{th} and 8^{th} graders. Set to open for the 2001-02 school year, it will also serve 6^{th} graders, who now attend the district's elementary schools.

Sycamore Elementary School

Sycamore Elementary is located in a comfortable middle-class neighborhood near the district's boundary. Of its approximately 455 students, about 70 are bussed in from a high poverty area near the city's downtown and about 210 are county students who pay tuition to attend the school. However, several factors are contributing to a change in the immediate and long-term population. As previously mentioned, the district's new junior high will take all 6th graders from the elementary schools, beginning with the next school year. A long-term population change may develop with the opening of a new elementary school in the county system. While school officials do not expect to lose many tuition students already enrolled at Sycamore Elementary, they do expect that in the future, county parents with young children may elect to enroll them in the county system, thus saving the tuition fee.

Of the district's elementary schools, Sycamore Elementary has the lowest percentage of students participating in the free/reduced price lunch program, at 22.6%, barely edging out another elementary school with a rate of 22.7%. Principal Brown said that the school will qualify next year for the school-wide Title I program, based on the number of in-district students who will qualify for the lunch program.

At Sycamore Elementary, the emphasis is on teaching rather than on high priced activities or tools, Mr. Brown said. The teaching staff is stable and experienced, but not yet close to retirement. Like their students, they are held to high expectations, Mr. Brown said. "Doing extra is expected," he added.

Students are held to high expectations, as well. Teachers focus on the Core Content as the foundation for their instruction, and they include scoring rubrics so that students know how they measure up. The "Writers' Wall" near the main office displays examples of proficient and distinguished student writing as well as writings from teachers and parents. Teachers spoke of routinely including open-response questions on their tests and teaching the use of organizers (URTOPS) to help students write complete responses to this type of question. They also use an interdisciplinary approach (using timelines to connect mathematics and social studies or writing a reflection on the science fair, for example) to show students that knowledge is interconnected. Beginning in 4th grade, students begin the transition into homework. Typically, students in the 4th, 5th, and 6th grades will have from 1 to 1.5 hours of homework each night, and they are expected to complete it. This is a process that students—and their parents—must learn to get used to, Mr. Brown said, noting that their school day is the shortest that is acceptable by regulation. Because of this, homework is necessary to reinforce the lessons, he said.

Many parents are involved in the school. This year, the Parent Teacher Association gave the school \$20,000 for computers, and 415 of 448 parents attended conferences with their child's teacher, Mr. Brown said.

The school has used a departmentalized approach, called "skilled teaching areas," for the past several years, and teachers generally are pleased with the way it is working. This approach begins in the 4th grade. One teacher, for example, is responsible for all 4th and 5th grade science, meaning that she has a dedicated classroom for science as well as two years with the same students. Beginning in the 4th grade, her students keep a science notebook that they will maintain through the 5th grade. At times, she reported, her students use their notebooks in place of their textbook. Other teachers are subject specialists, as well, assuming responsibilities for one or two subjects, such as 4th grade writing or social studies and grammar. Besides letting teachers teach what they know best and are most comfortable with, this system would appear to strengthen the curriculum in other ways. For example, one teacher said that with the departmentalized approach, she can concentrate her professional development on her specialty rather than spreading it over several subjects as might be necessary in a self-contained classroom.

The departmentalization approach appears to be particularly helpful for 4th grade writing. Because portfolio development takes place during the 4th grade, students spend much time writing and revising their portfolio entries. The teacher said that this process is enhanced through computer use, and her classroom has several available for students to use. She said she believes it is important to use computers throughout the entire portfolio process rather than just at the end, and she tries to integrate computer skills with the writing process. During our visit, she was conferencing with individual students about their portfolio entries because the portfolio deadline was getting near. In order for her to meet

with individual students, the school had hired a substitute teacher who worked with the rest of the students.

The school uses the Accelerated Reader program with its system of points, grade levels, and tests as a part of a student's reading grade, a teacher noted. Students also take the STAR reading test four times per year to determine at which grade level they are reading. They also must maintain a reading log and must read 90 minutes per week, which is considered part of their homework.

The primary grades at Sycamore Elementary are organized with a certain amount of flexibility built into the system. This enables teachers to shift students to another grade within the primary grouping as needed. Some students, for example, may need extra help with a particular subject for a few weeks or even for a semester; some, on the other hand, may need more of a challenge in a certain subject. They could be "bumped up" to a more advanced classroom to better meet their needs, a primary teacher said.

Sycamore Junior High School

All elementary schools in the district feed into Sycamore Junior High School, which reflects the diversity of its feeder schools. Of its approximately 500 students, about 12% are enrolled in ESL programs. These students come from a wide range of countries, including Bosnia, Laos, Cambodia, South Korea, and Guatemala. School-wide nearly 60% of the students qualify for free/reduced price lunches, and 25% pay tuition to attend the city school. Finally, about 25% are considered "homeless" in the sense that there is no nurturing adult serving as an authority figure in the home, according to Mr. Hopkins, the junior high's principal. They live in houses, but they do not live in homes, he added. For many students, entering the junior high school as 7th graders is the first opportunity they have had to interact with students different from themselves, he noted.

To accommodate this varied student body, the school offers varied programs: ESL classes, Exceptional Child Education (ECE) programs, Extended School Services, and honors/accelerated programs, to name a few. The honors/accelerated programs differ by grade, with mathematics, science, and language arts courses offered to 7th graders and mathematics, social studies, and language arts offered to 8th graders. Students qualify for these courses as a result of test scores and teacher recommendation, Mr. Hopkins said. In addition, students can qualify for individual honors courses—being placed in honors mathematics does not automatically mean that the student will be placed in honors language arts.

The school, located in Sycamore's downtown area, was at one time the district's high school. A university is near the school, and the proximity has created a situation in which the junior high serves almost as a "lab school" for the university's department of education. Many university students come to the school to observe and student teach.

Language arts teachers find themselves covering several aspects of the school's curriculum as it relates to the Core Content. With portfolios, on-demand writing and reading assessed in the 7th grade, it previously left 8th grade language arts teachers "off the

hook" as far as the Core Content went. Now, however, 7th and 8th grade language arts teachers at the junior high volunteered to switch a couple of their classes to ease the burden on 7th grade teachers. For example, an 8th grade language arts teacher currently teaches 2 sections of 7th grade language arts; the 7th grade language arts teacher picks up the 2 sections of 8th grade language arts. In this way, the portfolio burden is spread out among more teachers. One 8th grade teacher we interviewed said that she noticed more pressure on her because she was now responsible for ensuring that her students' portfolios were revised and completed on time. However, she did not sound as if she regretted taking on this extra responsibility. Eighth-grade language arts teachers also use their course to cover material from the Arts and Humanities curriculum by studying plays. In one 8th grade class we observed, students were reading "The Diary of Anne Frank" and also analyzing a painting whose subject was the Holocaust.

Seventh-grade students were hard at work completing their portfolios in computer labs during their language arts period. They used peer editors as well as conferencing with their teacher during the revision process. During one observation, we noted that more than half of the class were ESL students. The teacher commented that the presence of so many ESL students in a single school can contribute to lower portfolio scores since these students are required to submit portfolios after they have completed two full years of English instruction. Many will not have mastered English in that time, she said. ESL students who are still in the 2-year "grace period" are required to complete a portfolio for a class grade, she added.

The school pays attention to student reading through the Accelerated Reader program and the STAR testing component, done in both grades. The Accelerated Reader program counts as a part of the student's reading grade. Seventh-grade students who do not take band take an extra reading course (in addition to their regular language arts class), instead, using the Accelerated Reader and the Skills Bank to target reading comprehension and vocabulary.

Students in the ECE program also focus on the Core Content. During one observation, we saw students answering an open-response question using strategies such as circling and defining verbs in the question and using an organizer (4-column method) to assist them in preparing to write. The teacher noted that last year was the first in which there was at least one score above Novice in every content area from his students, which he described as a "great accomplishment."

Pine County

Students who attend public schools in Pine County typically see about 18 to 20 days tacked on to their school year, the result of snow that frequently coats the mountain roads that wind through this eastern Kentucky district. It is easy to understand the problem that even a small amount of snow can bring when one sees the area: The county seat of Pine County occupies the only flat land available, in a small valley through which a narrow stream flows. Although the high school is in the valley, the elementary and middle schools that we visited were built on nearby mountains, parts of which had been leveled for their construction.

Coal mining traditionally has been the major industry in this area, although fewer miners now are needed as mines are becoming more automated. A federal prison is expected to open in the next couple of years, and this may bring in some new people to the community as well as providing job opportunities for residents.

Pine County Public Schools

The Pine County school district has about 2,500 students in its schools, and 70.2% take part in the free/reduced price lunch program. This statistic places the district in the bottom 15% of public school districts in the state in the percentage of students enrolled in the federally sponsored program, with at least 85% of districts having lower percentages of participants. Nearly all students in the district are White.

The district is taking part in the Comprehensive School Reform Demonstration (CSRD) program, a federal grant program. Schools that have been selected for the grant receive \$50,000 yearly, renewable for three years, from the U.S. Department of Education, which oversees the grant program. As part of the grant program, participating schools must agree to adopt a schoolwide reform effort, rather than taking a scattershot approach to reform. The district selected the America's Choice School Design™ program (formerly known as New Standards), to help it in its reform effort, according to Mr. Musgrave, the district's secondary supervisor. The program, which Mr. Musgrave said he hopes will help raise student scores on the Kentucky statewide assessments, is in its second year at the high school and Pine Middle School and the first year at Pine Elementary School.

The emphasis during the first two years of the America's Choice™ program is on writing and reading. Two teachers per school serve as the literacy coach and design coach, attending several training sessions per year and bringing information back to their schools. They work closely with classroom teachers to help them implement the program. Other subjects, such as social studies, may be added during the third year.

Because America's Choice[™] has its own standards, teachers and district personnel had to make sure that they were not ignoring Kentucky's Core Content for Assessment or the Program of Studies. For example, previously Mr. Musgrave and some mathematics teachers took all three documents and collapsed them into a single document listing concepts and topics to be covered in all three grades of middle school mathematics.

The schools participate in Scholastic Reading Counts!, a program that encourages students to read at least 25 books (the "25-Book campaign") during the school year. After reading a book, students take a computer-based quiz for comprehension to ensure that they have read the book, an elementary teacher said. The program also generates computerized reports alerting teachers when students have not recently taken a quiz or if they have been selecting books below their reading level.

The district is working to align its curriculum across school boundaries, Mr. Musgrave said. At the time of our visit in mid-March 2000, Mr. Musgrave said he was examining what was taking place in what he called "transition points"—those grades that should be preparing students for work at the next level. For example, because science is not assessed in the 5th and 8th grades, there has been a tendency for many schools in the state to reduce science instruction in those grades. Instead, they give the time to other subjects that are assessed, such as mathematics or social studies. Mr. Musgrave said he is working with science teachers in the 8th grade and at the high school to establish a dialogue between the two levels. He said he also wants to require at least 3 hours per week of science instruction in the district's schools.

Finally, Mr. Musgrave described a district-wide portfolio conferencing program that trains community volunteers to work with middle school students in the portfolio process. Mr. Musgrave and others from the district office, as well as some community volunteers, received portfolio training that taught them how to work with students during a portfolio conference. Each trained person was then assigned three students and met with them two or three times during the school year. This is the second year for this program.

Pine Elementary School

About 400 students attend Pine Elementary School; 73.1% take part in the free/reduced price lunch program.

America's Choice

After having been established for a couple of years at the high school and middle schools, the America's Choice School Design™ program has made its way into Pine Elementary School this school year. During this first year of the program, the focus is on writing; next year, the focus will be on reading. The literacy and design coaches work to establish model classrooms that demonstrate strategies and standards and also to take minilessons into other classrooms.

According to the principal, the program was supposed to begin its emphasis on writing with 4th-grade students, but because that grade is dedicated to portfolio development, it was decided to begin the program's writing instruction a grade earlier. The literacy coordinator said she has noted that America's Choice writing standards are higher than the Kentucky writing standards for K-3 students, but the 4th-grade standards are lower than the standards developed for Kentucky portfolios. She also mentioned that she hopes to see a gain in portfolio scores as a result of the America's Choice program. The K-3 writing standards are "awesome" for Kentucky portfolios, she said.

Special Education Programs

The special education program at Pine Elementary operates on a departmentalized basis, with one teacher specializing in reading and the other in mathematics. It has been departmentalized for about 3 years and seems to be better meeting students' needs, according to a special education teacher. Special education teachers feel less isolated under the current system and are better able to share ideas about students they have in common with other special education teachers or regular classroom teachers, she added.

The mathematics special education teacher works with students in all grade levels at the school. Typically, 20 to 28 students come to her classroom daily for 30 minutes to 1 hour; the number of students will never be greater than 6 at any one time, she said. Depending on student needs, special education mathematics may be the only mathematics instruction the child receives, or the child may receive a combination of special education and regular classroom mathematics. The mathematics program uses "Touchpoint Math," a system of tactile learning that teaches students to touch the numbers as a way of reinforcement.

The reading special education program is organized on a similar basis to the mathematics program. The teacher meets with about 25 to 33 students daily, who are grouped by the type of reading problem they have. As one of her tools, she uses the Great Leaps reading program with some students. This is the second year for that program, she said. The Great Leaps system uses a series of timed exercises that teach students phonics and sight words and helps with word recognition, she said.

ESS/Portfolios

Pine Elementary School uses part of its ESS program to help 4th-grade students complete their portfolios. At the time of our visit, the deadline for portfolio completion was only a month away, with spring break taking a week or so of that time. Teachers were paying special attention to those students who were thought to be right on the border between two grade categories. With a little extra effort, it was hoped that those students could be pushed from Novice to Apprentice or from Apprentice to Distinguished. During our observation, six students came in for portfolio help, and a teacher estimated that every 4th-grade student would spend at least some time in ESS working on portfolio entries. The school requires that all portfolio pieces be typed, and ESS gives students the opportunity to use computers for word processing as well as doing internet research—something students are unlikely to be able to do at home, the teacher added. The school provides transportation for students who attend ESS. With the association of the school with the America's Choice program, ESS has taken on more of an emphasis on writing and literacy, a teacher said.

Pine Middle School

Pine Middle School has about 325 students who come from three elementary schools; 72.7% of the student population takes part in the free/reduced price lunch program. The guidance counselor reported a high rate of two types of student transience.

The first type is between the district's two middle schools. The second type is between the county and Columbus, Ohio, as families move north to seek jobs and then return to the mountains, a cycle which can be repeated several times. Although the district can do nothing to limit moves in the latter case, it is considering implementing a policy that would address transfers between the middle schools, a guidance counselor reported.

America's Choice

The middle school is in its second year of the America's Choice program. It has suffered some setbacks due to staff transience and the illness of one of the program's coaches, and replacement teachers have had to be retrained. Also, the middle school returned to the Accelerated Reader program instead of using the Reading Counts! program, primarily because of AR's ease of management, the coaches said.

America's Choice administers a reference exam in September to 7th graders. The coaches said this exam is similar to the Kentucky Core Content Tests as it, too, consists of open-response and multiple-choice questions. These are scored and returned and provide individualized feedback, they said. An entire class's scores can also be analyzed to determine common strengths and weaknesses to help fine-tune instruction.

Remediation Programs

Pine Middle School offers a program that assists 6th-grade students who have problems with reading. Known as the Struggling Reader program, it is part of the America's Choice program and targets those students who are reading two or three grade levels below where they should be, according to the teacher, who administered the STAR reading test to all incoming 6th graders as a screening test at the beginning of the school year. Pine Middle School is currently in the first year of the Struggling Reader program, which is designed to take 2 years to complete.

Students remain in the class, which takes the place of a regular language arts class, for two periods each day. The teacher has two separate groups of students in the Struggling Reader program, a morning and an afternoon group. The morning group serves as a pilot group this year, and it took a special pretest after being placed in the class. A posttest is scheduled to be given at the end of the year, the teacher said.

Students in this program work on the 25-book campaign (part of the Reading Counts! program), as well as reading in small groups, writing, and peer tutoring in the elementary school. As peer tutors, students create picture books, using published books as models or templates. They change at least one aspect of the published story, such as the setting, and illustrate it to create their own picture books. They then take their creations to a 1st-grade classroom to share with the younger students.

The Extended School Service (ESS) program meets 3 days per week, and it offers students help in science, mathematics, and language arts. The district offers bus transportation to participating students at least 1 day per week, as the ESS bus runs to different areas of the county each day. Typically, about 25 students per session attend ESS;

their classroom teachers refer them to the program, the building coordinator said. While in ESS, students concentrate on skill building and hands-on activities, the coordinator said, noting that the state has specified that only 10% of ESS time can be spent on homework completion.

The school gauges the success of the ESS program in several ways. Classroom teachers provide ongoing feedback on student progress throughout the school year, and ESS teachers complete an evaluation form on students with whom they have regularly worked at the end of the school year.

The school is reinstituting a summer school program for those students in danger of failing one or more subjects. Although summer school had been offered in the past, it had not been especially well attended, a counselor said. Under the America's Choice program, however, summer school is a more integral part, and students will be more strongly encouraged to attend.

Mathematics Programs

The mathematics program uses several programs to meet the needs of students who take a variety of mandated assessments according to their grade¹. In the 6th grade, for example, students use America's Choice™ mathematics workbooks. In the 8th grade, on the other hand, students have two mathematics classes: one uses the Accelerated Mathematics to reinforce basic skills and the other teaches problem-solving skills, an important part of Kentucky's assessment. The variety of standards (America's Choice™, Core Content for Assessment, and Program of Studies) currently in use meant that a committee had to develop a single mathematics document per grade level to ensure that all necessary topics were covered, according to a teacher involved in the process. She added that by teaching to Core Content standards, they also cover CTBS content.

Portfolio Conferencing

As mentioned previously, the district trained 20 to 25 people, including those at the district office as well as community volunteers (retired teachers and local pastors, for example) on the proper way to work with student portfolio entries. These trained volunteers then met with students several times during the school year to help edit the entries. Conferencing took place in the school's media center. Students were called to the center as volunteers finished conferencing with other students, who then moved to computers to make corrections or additions.

Youth Service Center

This is the first year that the middle school has had a youth service center, winning a funding grant after having applied twice previously for it. The \$73,000 grant was enough to set up youth service centers at both middle schools in the Pine County district. The

¹ Sixth-grade students take the CTBS test battery and eighth-grade students take the mathematics portion of the Kentucky Core Content Test.

schools split the director's services, who spends 2 days at one school and 3 days at the other.

Typically, the center at Pine Middle serves 15 to 20 students per day who need help with clothing, school supplies, or even medical help such as eyeglasses, the director said. Her job requires a knowledge of the community and a willingness to seek creative solutions. "You have to know where help is out there and be willing to go out and get it," she said. About 80% of students at the school who seek help do so through her office first, rather than going to the office or a counselor, she added.

She also helps coordinate parent volunteers who, thus far, have amassed more than 900 volunteer hours at the school. Previously, she noted, there were few parent volunteers at the school. She attributes the increase in hours to the possibility that parents may feel more comfortable coming to her office, with its more casual feel.

The center also supported the school's first "Ready Fest," a combination cookout and open house that gave students and their families the chance to meet informally with staff. The center provided door prizes as incentives to attend the festival.

Character education

Pine Middle School is in the first year of a character education program that is supported by a \$3,700 grant from a state university. The grant helps cover the expenses of bringing guest speakers to the school and other expenses. The character education program targets 6th-grade students this year, and it is hoped that the program will be extended next year into the 7th grade, as well, a guidance counselor said. The program takes place during the 6th grade's Period 3, a time when no regular classes are scheduled. Students remain with a single teacher for character education during the 9 week grading period, discussing a single topic such as respect or anger management during that time, the counselor said. At the end of the grading period, students rotate to another teacher and study a different aspect of character education.

Maple County

Maple County is one of the most ethnically diverse counties in Kentucky. As the city and county have grown, the disparity of wealth among its citizens has manifested in the wide variety of neighborhoods in the area. The county contains both wealthy suburbs and poverty-stricken urban areas within a few miles of each other. The county also contains about 34,000 acres of farmland, which adds a rural flavor to the diverse mix of Maple County residents.

Maple County School District

Maple County is the other urban district in our study. As we also found in the Elm County school district, Maple County can afford to have much more specialized staff members than most Kentucky school districts simply because of its size. In addition, about 83% of its teachers have Master's degrees or better.

Because the system is so large, we focused our data collection on a single school, Maple Middle School. We obtained a district perspective from Dr. Foreman, the Assistant Superintendent for Districtwide Instructional Services. She told us that the most important thing the district did for Maple County schools was to provide professional development for principals. Five years ago the district completely revamped its methodology for providing professional development for principals. Now the district forms groups of principals around common goals and needs and then uses those cohort groups to provide self-assessment. Principals collect samples of student work and classroom observation notes that they use to discuss activities within their schools and the progress the school has made. In this way the principals are held accountable for using the lessons learned during professional development to implement policy at their schools. The professional development sessions themselves are focused on instructional leadership and accountability. Dr. Foreman also said that the district's observation instrument was modified to better represent higher-order thinking skills, so principals could get more information out of performing classroom observations.

District-level administrative support does not end with professional development. Dr. Foreman outlined several programs that added administrative staff for schools, particularly those that scored poorly on the Kentucky Core Content Test. First, the Schools Under 40 Program was designed to help struggling schools by providing expert assistance and additional directed funding. All schools that had a composite KIRIS (the accountability system before CATS) score of less than 40 received this assistance when the program began. Dr. Foreman said that the program was continuing under CATS, but she wasn't sure about the new qualifying cut score. It is important to note that this system of providing assistance is different from the assistance provided by the state. Where the state provides rewards or assistance based on improvement scores, this system will provide assistance to all schools below a threshold score irrespective of gain. Maple Middle has received assistance through this program since its inception. The program provides an additional staff member who works with teachers and administrators to

improve test scores. It also provides funding for 2 days to 1 week of additional teacher professional development. Each participating school must decide on two or three areas on which to focus their efforts. One of those areas must be literacy. The program provides funding for buying furniture and/or equipment to construct a model literacy classroom. Literacy experts are brought into the school to perform an inspection and recommend changes. The program provides a minimum of \$2,500 for the creation of one model literacy classroom per participating school. The district also counts on these literacy programs to help schools integrate more technology into their everyday teaching.

The district also provides administrative support by purchasing days for retired administrators to work with current middle school principals. Typically, a retired administrator will spend between 20 and 40 days in a middle school as an assistant and advisor. Maple County also funds the School Dialog Process, a program designed to make the schools' Consolidated Plan a living-document. A team from the central office (six or seven individuals) will review a school's Consolidated Plan. They then spend a day at the school and meet with a school team, composed of the principal, a teacher, an SBDM council member, a parent, and one other person designated by the school. During their meeting they discuss the implementation of the Consolidated Plan. This program was put in place to ensure that schools paid close attention to their own improvement plans and were held accountable for implementing those plans.

Dr. Foreman explained that Maple County has a partnership with KDE through a memorandum of agreement whereby Highly Skilled Educators (HSEs) are chosen by Maple County. The HSE program is a state-level system of providing assistance for declining schools in the form of an expert educator who works with staff members to improve test scores. These individuals were called Distinguished Educators in the KIRIS system. In Maple County the HSEs are called District Leaders and whenever possible they are former Maple County employees. By choosing former employees (mostly exprincipals) from Maple County, the district hopes to avoid the time lag required to bring rural HSEs "up to speed" on the urban issues that can't be ignored when working in Maple County.

In addition to working with school administrators, Maple County has recently given poor performing schools the option of adding more calendar days to their school year. Maple Middle School was one of the schools given this option. While two other schools in the county took the extra days, Maple Middle instead chose to implement a voluntary summer program. The summer program serves about half of Maple Middle's student population.

In terms of district-level programs for students, Maple County offers a wide variety of options for low-performing students. Programs for high-performing students may be more school-based, given the district's many magnet schools and traditional programs. Like most other districts we've visited, the district has a strong focus on literacy and mathematics. The Immersion Program is a Maple County program aimed at low-performing 6th graders. The district provides extra funds to support this program at Maple Middle and Western Middle Schools. The students are placed in a classroom with two

teachers and one instructional assistant where they are "immersed in literacy and mathematics." Dr. Foreman said that the goal of the program was to help students improve enough so that they could be successful with a more typical schedule in the 7th grade. Essentially, this overt tracking in of 6th graders is designed to eliminate the need for such tracking by the 7th grade. Literacy and mathematics are seen as gateway subjects, without which students cannot be successful in science, social studies, or other classes. This program is funded through Title 1 and is new this year, so only anecdotal accounts of its success are available at this time.

A number of schools in Maple County are also using Connected Mathematics, a national mathematics program for low-performing students. The focus of the program is to prepare teachers to reach students of varying ability levels and at the same time to hold high expectations for student performance. Connected Mathematics is a "pull out" program, but the students participating are doing the same kinds of work as their peers in the regular classroom. The district adopted Connected Mathematics as a result of the School Dialog Process. Maple County is also encouraging an increase in the level of mathematics taught at the middle school level. Four years ago, only 26% of middle school students took algebra; now about 50% do so.

The district has also adopted the "Read 180" program, a multimedia balanced literary approach to teaching reading. Nearly 75% of Maple County's middle schools have the program currently in place and the numbers are expected to expand. The program is expensive, costing about \$20,000 per school. Read 180 is used primarily for 6th graders and operates on a "pullout" basis. It is not as intensive as the Immersion Program, however, and participating students also attend regular classes. Positive gains in reading (on the Kentucky Core Content Test) have resulted from the program, according to Dr. Foreman.

Other programs for low performing students include a program designed for older 8th graders (14-16) who are considered at risk of dropping out of school. The program provides an alternative to the regular classroom by placing students in a different setting if necessary. In addition, the district supports an after-school co-curricular and sports program. The district will also pay the user fee for schools to participate in the AVID (Advancement Via Individual Determination) program. Dr. Foreman said that the AVID program is no longer funded by the state and must be paid for largely out of school funds. For that reason, the program has taken a back seat at Maple Middle and other schools. Currently, Maple Middle is trying to tie GEAR UP (Gaining Early Awareness and Readiness for Undergraduate Program) to AVID. GEAR UP is another program designed to increase the likeliness that students will attend college. It is targeted for 7th graders and includes academic and other activities.

In addition to programs, Maple County is also working on alignment documents. The district has recommended that schools examine mapping documents by grading period. The goal is to limit missed opportunities caused by student transience. The district is planning to include tools for designing curriculum and open-ended questions in the alignment documents. The alignment documents will be used in concert with performance

standards designed to match the Core Content for every grade and subject. Maple County has used the Program of Studies and other documents in the design of these instruments. The district puts considerable stock in the value of curriculum alignment and performance standards. Dr. Foreman commented, "There are lots of resources going into schools. Lack of funding is not the problem. We are still missing the multiple K-12 system (of curriculum alignment and exit criteria) where everyone knows what is expected and everyone is held accountable."

Competition for students within the county is intense. In addition to a strong Catholic system, private schools, and other parochial schools, students may select from several enrollment options within Maple County. Traditional and magnet school options are attractive alternatives for some students who want to remain in the public school system. Parents can choose (with very few limitations) which school they'd like for their children to attend within the system. If parents are willing to provide transportation and their children can meet the entrance criteria of the various specialty schools, they are not limited to a single neighborhood school.

Maple Middle School

Maple Middle School currently serves 767 students, most of whom live in the neighborhoods surrounding the school. The student population of Maple Middle School is urban, ethnically diverse, and poor. About 80% of Maple Middle students receive free or reduced-price lunch compared with a state average of less than 50%. Maple Middle's attendance rate is 88%, compared with a state average of nearly 94%. Each year Maple Middle retains about 10% of its students, compared with a state average of only 4%. In the 1999-2000 school year, Maple Middle had 591 incidents that resulted in student suspensions involving 305 students, so roughly 40% of its students were suspended at some time during the school year.

Maple Middle students' test scores on the Kentucky Core Content Test are among the worst in the state. The three elementary schools that provide most of Maple Middle's students were all among the 10 lowest scoring elementary schools in the state. Maple Middle has a very large proportion of special education students. Estimates from teachers at the school suggest that about 25% of the student population have an IEP. Dr. Foreman explained that many special education students were from Maple Middle's home area, and since many more non-ECE (Exceptional Child Education) students apply to other programs, the school is left with a disproportionate population.

According to statistical accounts and test scores Maple Middle is not a very good school. So, why is it included in this research about successful school programs? The answer lies in the definition of success we have chosen to adopt for this research. Maple Middle School has created a variety of successful programs targeted at its own student population. The administration and teachers at Maple Middle continue to strive for success despite very difficult conditions. Programs at this school must necessarily take into account that the students for whom the programs are designed may not be used to being successful.

Mr. Straney, Maple Middle's principal, told us that the most important improvement he was trying to accomplish was to rebuild the school's learning environment. He explained that he didn't think the environment at Maple Middle currently was very conducive to academic achievement. His plan for improving the learning environment included rebuilding the discipline plan, controlling the efficiency and design of the school to eliminate duplication of efforts, and creating a system of rules and sanctions that worked. A large part of his plan involved creating a support system for teachers. He explained that there were essentially three kinds of teachers, those who needed little or no external support, those for whom no amount of support would help, and those who would be successful if given the administrative support they needed.

Mr.Straney, a former Distinguished Educator (DE) and Highly Skilled Educator (HSE) who is in his first year as Maple Middle's principal, is no stranger to working with schools in trouble. He shared an insight with us regarding learning environment and test scores. He explained that while he was sure that improvements in the learning environment would bring up test scores, he also was sure that the scores would plateau shortly thereafter. At that time Maple Middle will reassess what needs to be done and will likely be more successful implementing curricular or academic programs.

Student Participation

One of the most noticeable aspects of most programs at Maple Middle is its strong focus on getting the students actively involved in the learning process. "Anything to get the kids involved," is a common phrase used by teachers at Maple Middle when asked about their instructional strategies. Many programs at the school focus on showing students the value of education in order to foster their participation. One language arts teacher explained that she was striving to make sure the books in her classroom were interesting to her students. She said that many students in her classes had no experience being around people who value reading and writing. Nearly all her students read at or below the 5th grade level (she teaches 7th grade). She purchased a variety of picture books to read to her students. She said that most of them were never read to at home. "They really pay attention," she said. "Anything to get kids to read."

A science teacher at Maple Middle has had a good deal of success by creating a Science Resource Binder. She began using the binder as a method of creating a resource for ECE kids. It included things such as notes and open-response questions. The binder supplements the science text, and can often be used during Kentucky Core Content Testing by ECE students. The rest of the class used the binder as a resource as well, and it allowed the ECE students to work at the same level as their peers in the classroom. According to the teacher, science vocabulary is so complicated that it just made sense to have a student science dictionary. Other science teachers at the school have begun to adapt the binder for their own classes, and claim that it teaches good note-taking and organizational skills, and helps students remember earlier lessons. The teacher who began using the Science Resource Binder has presented it to the entire staff and the school may try incorporating it across a team next year. She'd like to see it begin in the 6th grade and

build throughout the students' middle school years, in much the same way a portfolio is done. The binder could then be used to ensure student participation and to give students responsibility for creating and maintaining their own resource.

A social studies teacher described the merits of the Louisville Writing Project, a funded program for all subjects at Maple Middle . She said that she used nearly everything from the program in her class. A big component of the program is improving test scores by teaching students to write in social studies, take notes, and answer open-response questions. The program also helps provide ideas to get students interested and thinking. The social studies teacher said that students sometimes asked, "Can't we just do a worksheet?" as opposed to a project or more elaborate assignment.

Student involvement at Maple Middle is also being used to improve the learning environment of the school outside the classroom. The school has a large Peer Mediation program, with 15 students trained as peer mediators. Peer Mediators are typically chosen by teachers and are used to limit administrative involvement when conflict arises. The students are trained to help disagreeing parties resolve their issues non-violently. Conflict is common at Maple Middle. Last year alone, students performed 200 mediations. The program is so successful that students from Maple Middle were selected to present the program for the Department of Justice. It is not difficult to get these student mediators to wear the T-shirt that serves as their uniform.

Another form of student involvement at the school is the mentoring program. This program is not a tutoring program and is not for students with serious problems, according to the media center's director, who organizes the program each year. Rather, it is for students who might profit from having a mentor, or "adult friend," who can help them set personal goals, she said. Teachers recommend students for the program, and the director matches them with school staff volunteers, which can include any adult who works at the school. These volunteers receive training and a handbook which outlines appropriate activities or boundaries. Students receive the same handbook and must obtain parental permission before they can participate in the program. Typically, students and their mentors meet weekly for 15 to 20 minutes in informal activities, such as eating lunch together or taking a walk around the school. Three times a year, a larger "social" is held that includes all students and their mentors.

Parent Involvement

Maple Middle's Family Resource Center (FRC) director told us about the CHAMPS (Caring Helps Another Make Progress in School) program. It is a homegrown program and receives funding from a local bank. Each month, the school has a catered luncheon for students (one per homeroom) who have been recognized for improving in some way and their parents. At the luncheons, guest speakers, such the head football coach from a nearby univerity, talk with students. By being named champs, students qualify for the end-of-year Super-CHAMPS program, which follows the same format, but also includes a field trip to the bank's headquarters. The director told us that the program helped show students the value of education and increased parent participation at the

school. He said that 8 or 9 years ago, very few parents showed up for the program, but now the luncheon is "standing-room-only."

The FRC director also described the REACH (Reach into Every Adult and Child's Home) program. It was designed to break down the barriers to performance. Components of the REACH program include mental health, drug and alcohol awareness, referrals to health services, summer part-time employment (which may be phased out), parental involvement, and attendance. The director explained that these issues are of great significance at Maple Middle. He described the school as "best at being the worst in some statistics." According to the FRC director, REACH has touched every student in the building in some way.

Getting parents to come to conferences is often difficult at Maple Middle. One method that has increased parent participation was to allow students to lead the conferences. A science teacher explained that she had students write letters asking their parents to attend the conferences. She provided a babysitter, snacks, and door prizes. When the parents came for the conference, their child did most of the talking. She explained that more parents attended and that the experience had a very positive effect on her students. That same teacher also described the Parent/Child Journal. Parents and students each do a journal entry on a topic. They then share their entries to get each other's perspectives on the topic. This program began only this year at Maple Middle, but looks promising, according to the teacher.

Focus on Literacy

Many students at Maple Middle have poor reading skills. A language arts teacher, for example, told us that none of her students read above a 5th-grade level. This problem has led the school to focus on reading to a great extent, particularly in the 6th grade. Sixth-grade students who read poorly are placed in the Immersion Program, which provides an intensive curriculum of literacy and mathematics for the entire school day. These students do not receive classes in subjects such as science or social studies in order to give them time to catch up to their peers in reading. Reading is seen as a gateway skill, necessary for success in other subjects. Immersion Program students also have mathematics classes because of the structured hierarchical nature of middle school mathematics. The goal of the program is to improve students' reading skills enough that they can be successful with a more typical class schedule in the 7th grade.

In addition, the Louisville Writing Project has encouraged writing across the curriculum at Maple Middle. It was funded through a 3-year Comprehensive School Reform Directive (CSRD) grant and is in its 2nd year at Maple Middle. The writing project holds weekly study groups that rotate through each of the departments at the school, so that each subject teacher spends an afternoon with the project about once per month. The goal of the project is to improve literacy and the director of the project says she thinks Maple Middle is making progress.

Most teachers at the school also use the Accelerated Reader (AR) program. AR provides an easily implemented system for getting students to read books. Students are rewarded for reading many books and for increasing their reading level (measured by the STAR tests). At Maple Middle, AR is used to "fill the gaps" for students who get ahead of their peers. In language arts classes, the school has allotted a certain amount of time when students Drop Everything And Read (DEAR). DEAR time is usually filled reading AR books.

Cottonwood County

The Cottonwood County public school district, in Kentucky's western region, is home to about 10,000 students. We focused on an elementary school that, despite challenges from poverty, appears to be overcoming those challenges. The school, which we call Cottonwood Elementary, has a free/reduced-price lunch rate of 57% (October 2000 data), compared to a district rate of about 33.3%, yet it has managed to post strong improvement in reading, writing, and science from 1994 to 1999.

Cottonwood County Public Schools

The district was early to recognize the benefits of curriculum alignment, and began efforts to do so within schools 6 years ago, according to Ms. Tatum, the district's director of elementary schools. This was before the Core Content for Assessment had been released, and it involved the creation of a "curriculum resource document" from the *Transformations* (KDE, 1995) book and the early Valued Outcomes guidelines, she said. Both horizontal and vertical alignment within the school were developed, thus ensuring that same-subject teachers at the same grade were covering the same material (horizontal alignment) and that same-subject teachers of different grades (6th-8th) grade English teachers, for example) were discussing who would teach what material in order to eliminate gaps and redundancies (vertical alignment). This early recognition was not the case at several schools we visited in previous studies. Indeed, some schools were only just beginning the curriculum alignment process as recently as a couple of years ago, even though the Core Content for Assessment has been in distribution for several years. After five years of school visits, it is our impression that this level of district-wide coordinated effort was not the norm.

The district is making plans to move the curriculum alignment to the next level, in which alignment between schools takes place, Ms. Tatum said. As an example, all English teachers at a middle school and its gaining high school would meet to discuss curriculum and plan who will teach what topics, and how those topics will be covered.

With an aligned curriculum in the planning process, the next step is the development of district standards and assessments. These are currently being developed, Ms. Tatum said, and will show how well students are learning the material. They will not be used as exit exams which students must pass in order to move to the next grade or to graduate, but instead will be used as diagnostic tools, she said.

The result of this curriculum alignment effort will be a target, or goal, for teachers rather than dictating exactly what teachers should do or teach, Ms. Tatum said. She said she realizes that every teacher has his or her own way of doing things, but expects that the aligned curriculum and district assessments will provide a standard, or rubric, to help them. "You have to know where you're going," she added. The aligned curriculum and district assessments are expected to help the district meet the needs of its transient students who move from school to school within the district, since there will be common expectations and standards in place across the district.

Another program that district officials hope will contribute to student success is the Graduation 2010 agenda. Graduation 2010 began with the kindergarten class of 1997-98, and it will follow that cohort through all 13 years of school until its graduation in 2010. Each new

kindergarten class forms a new cohort; the first cohort is now in the 3rd grade. Each cohort is "adopted" by a community organization, such as a local company or local university, that helps with additional support. Students are exposed to activities that are designed to stimulate their cognitive development, Ms. Tatum said. For example, students begin studying Spanish, piano keyboarding, and chess in the primary grades, as well as having artists in residence who instruct them in visual and performing arts. In addition, the program emphasizes the importance of reading and has as a goal the ability of each student to read on grade level by the end of primary.

In addition to the curriculum alignment, district assessments, and Graduation 2010, the district supports ongoing teacher professional development, Ms. Tatum said. One way is by providing teacher stipends for when teachers are involved in portfolio work or work required by the district, Ms. Tatum said. An interesting concept is the "Discovery Team," a team of teachers who move from building to building in order that a team of regular teachers can be released for training or collaboration. The "Discovery Team" comes complete with prepared lessons, typically in the Arts and Humanities curriculum. In this way, regular teachers can attend training and not worry about having to prepare lesson plans, Ms. Tatum said. Each team has an hour a week to collaborate or train by using this system, she added.

Because literacy is the focus of the current Consolidated Plan, Ms. Tatum said the district is examining several programs that may improve literacy. The district also is examining various reading assessment systems that can target struggling students who are reading below grade level, she said.

Cottonwood Elementary School

Cottonwood Elementary is located in an area that is undergoing development. As we noted earlier, about 57% of its students receive free/reduced price lunches (October 2000 data); however, a subdivision of middle-class homes is being built behind the school, and this might mean an increase in the numbers of middle-class students, according to one teacher. Because it currently has such a high percentage of students who qualify for Title I programming, the school qualifies for schoolwide Title I funding. This funding provides instructional assistants and two extra classroom teachers. The school has one "classroom reduction teacher," also known as a "Clinton teacher" because federal funding is paying that teacher's salary. The percentage of minority students is around 18%, according to Cottonwood's principal, Ms. Lewis.

Teacher transition at the school has been somewhat of a concern, according to Ms.Lewis, who noted that the school has had a 50% turnover rate among its staff over the past 3 years. She was unable to attribute the transition to any one cause, however.

The school has blended classes for its 3^{rd} - and 4^{th} -grade students, who share classrooms. These students remain together except for a 1.5-hour block during which grade-level mathematics and language arts instruction takes place.

The school aggressively searches for new methods to reach all of its students. Ms. Lewis reinforces a school culture built on the need for continuous improvement, always looking for "new and better ways."

Kindergarten program

People whose experience with kindergarten programs came many years ago might be surprised at the academic focus that kindergarten has acquired. In addition to learning the foundation of reading skills, such as recognizing the connection between letters and sounds, Cottonwood Elementary's kindergarten students learn to read number words and color words, a kindergarten teacher said. They even have "homework" which consists of simple books that students and their parents read together. In addition to reading, students in kindergarten are beginning the writing process by writing every day in their journals, the teacher noted. They also are introduced to mathematics, as well as science and social studies, in the form of "centers" that they can visit independently, she said. Less time is spent in what the casual observer might describe as "play centers"—by the time of our visit in late March 2000, students visited only one play center each day, according to the teacher.

Cottonwood Elementary, along with the other elementary schools in the district, is in its second year of full-day kindergarten. As a part of the full-day program, teachers have a full-time assistant if they have more than 24 students in their kindergarten class. The kindergarten teacher who we interviewed, in her 11th year of teaching, said that she is already able to tell a difference in what her students can learn in a full-day program compared to the old half-day program. At the time of our visit, she reported that almost all of her students were reading, compared to about half of them under the half-day system. The old system had not been meeting students' needs, she said.

The three kindergarten classes at Cottonwood use a couple of programs, Touchpoint Mathematics and Saxon Mathematics, to introduce students to mathematics. The Saxon program carries over into the primary and intermediate grades at Cottonwood, as well.

Language Arts Programs

The language arts program at Cottonwood Elementary uses a variety of methods to reach children. The Earobics computer-based reading program, for example, is in its third year at the school. Several primary-grade teachers share this program, sending students to the classroom where the computer is housed. The program maintains records for as many as 36 students (only 1 student at a time works on the Earobics program, however) as they work through a variety of reading skills by playing reading-oriented computer games. The teacher we interviewed said they select students for Earobics who are most in need of help in learning to read. It is also suitable for students with auditory and speech problems, she added. Typically, students work for about 15 minutes at a time, some as often as daily and others once a week. Each week, the program generates a report that shows student scores and the length of time the student has been on a particular task. These reports can be used as diagnostic tools for teachers, who can give students extra help using other methods and tools, the teacher said.

Reading Renaissance is a program that begins with all 3rd-grade students. Reading Renaissance combines computerized testing to determine a student's reading range and level with books that have had their reading range and level measured. A student is encouraged to select books from the appropriate level, and then he or she reads the book and takes a comprehension test. If the student passes, he or she earns points toward a target. Students are retested at midyear

and at the end of the year. The program is an extensive application of Accelerated Reader and includes regularly scheduled daily reading times.

The district uses specially trained writing cluster leaders to help inform classroom teachers about workshops and professional development opportunities and to instruct them on the latest writing strategies. The writing cluster leader at Cottonwood, for example, is also responsible for training teachers at two other schools within the district. The cluster leader is also responsible for training all certified staff at the school to score 4th-grade writing portfolios because all are involved in scoring them. At other schools throughout the state, portfolios might be scored by only the 4th-grade teachers. The cluster leader said that having all certified staff score portfolios "helps get everyone else's viewpoint." As we have seen in other studies, it also gives teachers in lower grades a working knowledge of the standards to which their students will eventually be held on their 4th-grade portfolio pieces. Last year, there were no Novice (the lowest of the four scoring categories) portfolios at Cottonwood, a record the school is trying to maintain this year, she said, while attempting to bring up on-demand writing scores.

As we saw in the kindergarten program, writing is a skill which is introduced in the early grades at Cottonwood. Teachers introduce students in early primary grades (K-2) to portfolio and on-demand pieces, while 3rd- and 4th-grade students receive more in-depth training, according to the writing cluster leader. Because of Cottonwood's blended 3rd- and 4th-grade classes, younger students are exposed to topics and skills at an earlier age, such as tackling on-demand science or social studies responses. Writing is also taught as a blended class, in which 3rd graders are challenged on an individual level, just like the 4th graders. The two years of concentrated writing effort produce noticeable results in student work.

There are several ways Cottonwood Elementary works with students who need extra assistance in writing. The Extended School Services (ESS) program is used to help students prepare their portfolios, especially in the weeks preceding the school's completion deadline, the writing cluster leader said. In addition to ESS sessions that met three days per week, the school had funds to sponsor one Saturday session to work on portfolios. Teachers volunteered time in order to hold another Saturday session, the cluster leader said. Teachers also conduct mini-writing workshops with students to reteach aspects of writing on which they need more work, she said.

Mathematics Programs

This is the third year for the Saxon Mathematics program at Cottonwood and the sixth in the district. One 5th-grade Cottonwood teacher described it as a spiraled program, meaning that concepts that had been introduced earlier are reviewed throughout the school year because each lesson includes a review section. Each lesson touches on mathematics facts, mental math, and problem solving. New topics may be introduced but not taught immediately, and are commonly found in the problem-solving section, she said.

Teachers apparently have a certain amount of freedom to decide just how they will use the program. Others may not have "bought in" to the program completely, the teacher said, because Saxon Mathematics does not teach in formal units, such as "time" or "clock" units, These teachers may supplement the Saxon program with their "old" units, the teacher said.

Cottonwood Elementary saw its mathematics scores on the Kentucky Core Content Tests increase for the first year of implementation and decline for the second year. The third cohort of students had not yet taken the statewide assessments at the time of our visit, but the teacher we interviewed said that teachers are looking at the program as an "experiment." "I don't think it's time to panic yet," she added. In the meantime, 5th-grade teachers at Cottonwood use extended classtime in mathematics instruction to help prepare students for the Kentucky Core Content Test in mathematics.

Cottonwood and another elementary in the district are coordinating their mathematics program because both of these schools feed into a common middle school, the teacher reported.

Beech County

Beech County, in the south-central part of the state, has a population of about 20,000; about 28% of whom (and 39% of the children in the county) live in poverty. Slightly more than one third of the county's population over 25 has a high school diploma, but less than 5% has a college degree. The county has a manufacturing base and is also starting to attract Hispanics into the area to work in its growing poultry processing industry. Despite the recent growth of the Hispanic population, however, the county remains about 97% White. The county also has an independent and a county school system.

Beech County School District

The Beech County School District has a student population of about 2,600 students. The Beech County School District has five schools, all centrally located within several blocks of each other in the county seat. Beech County High School is a newly constructed building that serves nearly 800 students in the 9th-12th grades. Beech Middle School houses the almost 400 7th-8th grade students. The elementary population is divided between an intermediate school, servicing almost 400 5th-6th grade students, an elementary school housing just over 600 2nd-4th grade students, and an elementary school housing about 360 kindergarten through 1st grade students.

There are essentially two kinds of walkthroughs that might occur in any school in the district. The superintendent can arrange a surprise walkthrough at any time. He begins the process by contacting all the principals in the district and telling them to meet him at a particular school. When the group arrives, they walk through the building, going into classrooms and observing instruction, talking to students and teachers, and eventually meeting with each other to discuss the implications of what they observed. Students are typically asked four questions when a walkthrough participant meets them. First, the student is asked what she is doing. Then she is asked why she is doing that particular assignment, and then she is asked if she is doing good work. Finally, she is asked how she knows her work is good.

The second type of walkthrough follows essentially the same format with two exceptions. First, teachers are included, creating a larger group of observers. Second, because coordination may take a little longer, the visits are not a total surprise. All schools know that a walkthrough is scheduled for an appointed time, but they find out the location of the walkthrough only about an hour before it takes place. The teachers are rotated to ensure participation and fairness. Researchers were allowed to participate in a walkthrough during our visit.

The walkthroughs serve multiple purposes. First, they serve to open the doors of a historically closed-door profession. The superintendent told us that when the program began, there were instances when visitors failed to see much instruction occurring. Now it is rare to find a teacher not actively engaged in instructing students. The walkthroughs also reinforce some of the district's policies in terms of instruction. The district promotes clear goals and expectations for students, or the idea that students should know exactly what they are doing, why they are doing it, and how they will be assessed for their work. The walkthroughs also may improve instruction. In addition to letting teachers know the district is paying attention to their role in education, the

walkthrough groups meet after their visit and discuss what they see. Those discussions could lead to professional development, changes in policy, or other changes in curriculum, instruction, or school climate.

Beech County has hired a former Highly Skilled Educator (HSE) who worked last year to assist schools that did not meet their improvement goals as part of Kentucky's accountability program. Now a temporary district employee, she is implementing the same types of changes at the district level that she was trained to use to help schools improve. Beech County is relatively isolated from much of the barrage of school reform programs that are marketed to more urban schools each year, so many of the programs seen elsewhere were not present there. Other districts have a large head start implementing programs like curriculum alignment, exit criteria, and other popular district-level initiatives. The former HSE has plans to help the district develop more options for improving schools.

Beech Middle School

Beech Middle School contains the 7th and 8th grades. The school is actually two buildings. The original building was previously the county's high school and was built in 1939 by President Franklin Roosevelt's WPA program. It became a middle school in 1972. In 1989, the annex building (located behind the original school) was added. It contains 14 classrooms, an administrative office, and the cafeteria.

The 400 7th- and 8th-grade students are divided into four teams (two per grade level). Each team consists of an English, math, literature, social studies, science, and special education teacher. Students are also offered exploratory elective classes such as drama, careers, music, art, band, and physical education. The core classes last 50 minutes each while the exploratory classes last 38 minutes.

Mr. Reeves, the principal, told us that about 73% of the students were eligible for the free or reduced-price meal program. Teachers told us that student home life was often one of the obstacles they had to overcome. Many parents are unable to help their middle school students with assignments. However, teachers did report that parents were more supportive of the elementary schools than the middle school.

Mr. Reeves helped us focus on five programs--Accelerated Reader, the school's writing program, portfolio mentoring program, mathematics, and how the school attends to the areas of arts and humanities and practical living. Teachers told us that Mr. Reeves' focus was on keeping the class sizes small. Beech Middle classes are limited to 20 students. Additionally, we found a very strong focus on Kentucky's Core Content. The school's scores are above the state average in all subjects except 8th grade math.

Accelerated Reader

The Accelerated Reader program has been at the school for about 6 years. Subject area teachers, other than language arts, have found ways to benefit from the program. An 8th grade social studies teacher explained that students in his class must get 10 points in social studies-related reading per 9-week period. These readings can be a biography, historical fiction, or non-fiction. A 7th grade literature teacher told us that the Accelerated Reader point goal increases each grading period and counts toward students' grades in literature. If students reach their goal, they score 100%. She explained that about 60% of her students reach their goals for each grading period.

Writing Program

Last year four writing teachers from the school went to Eastern Kentucky University (EKU) for specialized training and are putting it to use this year. Teachers said the changes resulted in a big improvement from the way things were being done. They reported that students were involved in the writing process every day. Teachers encourage students to publish their work. Student work is on display in the hallways and some students have published their work on the Internet. The writing teachers also model publishing by displaying their own writings. One writing teacher described her writing theory in terms of teaching children to write with the heart, head, and hands. The heart represents emotion and feelings, the head represents research (for all types of writing), and the hands represent presentation for a specific audience and purpose.

Other teachers at the school are also involved in the writing process. Beech Middle requires all teachers to include an open-response question twice each month and at least one ondemand writing per semester. Portfolio entries may come from other subject areas as well.

Portfolio Mentoring

All teachers and administrators are involved in the portfolio-mentoring program. Each is assigned about five students to mentor during the creation of their portfolio. They meet with students at least once for each entry. Writing teachers have worked with the other teachers to help them know what to look for at each level. The goal of the program is to get all students beyond the Novice level. The program is credited with helping the school reduce the number of Novice portfolios by half last year.

Mathematics

The school recently aligned 7th and 8th grade mathematics. They began the alignment process with an understanding that all students needed number skills, skills at computation, and knowledge of basic statistics. Teachers also focus on geometry in the 7th grade. Students review geometry in the 8th grade and apply the lessons they've learned to real life. Eighth-grade math focuses on algebraic ideas. The alignment was based on the core content and applying the core content in genuine situations. Math classes were small, with some students pulled out for a special algebra class and others for special education. Teachers told us that students' basic math skills were weak. However, rather than merely concentrating on math skills (numbers and computation), teachers have decided that they must introduce the core content and work on basic skills at the

same time. Teachers also use math manipulatives, Accelerated Math, MathScape, video mystery (a math problem-solving video), Dr. Math (video math lessons), Math for the Real World, and hands-on math as a means of garnering interest and motivating students.

Other Subjects

The school's focus is the Core Content. Exploratory classes are focused on arts and humanities and practical living/vocational studies portions of the Core Content. Beech Middle offers classes in music, theater, art, and physical education. The school maintains two arts and humanities teachers. The theater teacher explained that the exploratory classes were designed to prepare students for "life outside Beech County." She went on to describe the rural county as "culturally deprived," and said that the arts and humanities were not stressed in the area. The art teacher is passionate in his belief that students can produce extraordinary work with the right guidance. His approach is reminiscent of solid writing portfolio conferencing. Students are coached one-on-one toward ever-increasing levels of complexity in their art. The results are clearly visible.

Bibliography

- Clay, M. M. (1979; 1985). *The early detection of reading difficulties*. Auckland, NZ: Heinemann.
- Denzin, N. K., & Lincoln, Y. S. (1998). *The handbook of qualitative research*. Thousand Oaks, CA: Sage Publications, Inc.
- Gall, M. D., Borg, W. R., & Gall, J. P. (1996). *Educational research: an introduction*. (6 ed.). White Plains, NY: Longman Publishers.
- Harris, C. D., Hoffman, R. G., Koger, L. E., & Thacker, A. A. (1998). *The relationship between school gains in 7th and 8th grade KIRIS scores and instructional practices in mathematics, science, and social studies for 1997* (HumRRO Report FR-WATSD-98-05). Radcliff, KY: Human Resources Research Organization.
- Hoffman, R. G., Harris, C. D., Koger, L. E., & Thacker, A. A. (1997). *The relationship between school gains in 8th grade KIRIS scores and instructional practices in mathematics, science, and social studies* (LRS97-3). Frankfort, KY: Bureau of Learning Results Services, Kentucky Department of Education.
- Kentucky Department of Education. (1998). *Program of studies implementation manuals*. Frankfort, KY: Author.
- Kentucky Department of Education. (1997). *Kentucky consolidated planning process*. Frankfort, KY: Author.
- Kentucky Department of Education. (1996). *Core content for assessment*. Version 1.0. Frankfort, KY: Author.
- Kentucky Department of Education. (1995). *Transformations: Kentucky's curriculum framework*. Frankfort, KY: Author.
 - Kentucky Education Reform Act (Kentucky Revised Statutes 158.645).
- Patton, M. Q. (1990). *Qualitative evaluation and research methods*. (2 ed.). Newbury Park, CA: Sage Publications, Inc.
- Richards T. (2000). *N5 Reference Guide*. QSR International Pty. Ltd. Victoria, Australia.
- Stake, R. L. (1995). *The art of case study research*. Thousand Oaks, CA. Sage Publications, Inc.

- Thacker, A. A., Koger, L. E., Hoffman, R. G., & Koger, M. E. (2000). *The transition from KIRIS to CATS, year 2: instruction, communication, and perceptions at 31 Kentucky schools* (HumRRO Report FR-WATSD-00-23). Radcliff, KY: Human Resources Research Organization.
- Thacker, A. A., Koger, L. E., Hoffman, R. G., & Koger, M. E. (1999). *The transition from KIRIS to CATS: instruction, communication, and perceptions at 20 Kentucky schools* (HumRRO Report FR-WATSD-99-23). Radcliff, KY: Human Resources Research Organization.
- Thacker, A. A., Koger, L. E. & Koger, M. E. (1998). *Professional development under the Kentucky Education Reform Act: A study of practices in 30 middle schools* (HumRRO Report FR-WATSD-98-38). Radcliff, KY: Human Resources Research Organization.
- Wilhoit, G. (2001, February). When students read, they can succeed. *Kentucky Teacher*, 2.

Appendix A School Contact Letter

«Principal_Name»,

We're coming back! HumRRO and the Kentucky Department of Education have set a new agenda for this year's round of school visit studies. This time we're focusing on successful programs within schools. We're not limiting our study to science and social studies. We want to talk to the teachers who make your school successful, irrespective of their subject area.

We'll visit «School_Name» School on «Visit_Date».

If there are any problems with the listed dates, please don't hesitate to call and reschedule. We look forward to visiting «School_Name» School this year.

Two researchers will spend at least two days in your school. During that time they'll interview teachers identified as representatives of the strong programs in your school. They'll also observe classes and collect other pertinent information.

We've chosen to define programs loosely for this study. A program could be a subject area, such as the school's language arts program. It could be an off-the-shelf curricular aid, such as History Alive. It could be a homegrown in-school program, such after-school tutoring sessions. It could be a program designed to meet the needs of a particular group of students, such as a remedial reading program, a gifted and talented program, or a special education program. We're making our definition as open as possible because we want to hear success stories from your school. We want to know how the programs got started, what obstacles had to be overcome, how they've changed over the years, what differences they've made in your school, and how to keep them going.

This study includes 14 schools, 7 middle and 7 elementary and all are successful in some ways. They are not always the top scorers on the Kentucky Core Content Test. The schools were chosen because they represent different challenges, different student populations, and different geographic areas. We know that the things that work in one school may not work in another, but we hope that most schools can find similarities among the schools in our sample.

As always, our researchers will strive to be as unobtrusive as possible. We will work with you to schedule our interviews and classroom observations. We strive to maintain confidentiality. We appreciate the time you and your staff give us, and we thank you for giving us access to your school.

Sincerely, Art Thacker 1-800-219-9030 athacker@couriernet.infi.net Part of what makes this year's round of school visit studies challenging is the variety of people at each school we would like to interview and observe. In previous years we've focused only on science and social studies. We were generally able to talk to all science and social studies teachers at a school during the course of a single visit. Since we've expanded our focus to include other content areas as well, we probably won't get to talk to everyone. We want to use our time in your school efficiently and wisely, so again we're counting on your help.

Prior to our arrival, please create a list of teachers (or other staff members) that we should definitely interview during our visit. Schedule as many of those interviews as possible on the first day of our visit (see the scheduling worksheet provided). We will work with teachers as necessary to arrange classroom observations.

Interviews typically last about 30 minutes, but may run as long as 45 minutes. We want to avoid group interviews as much as possible because they tend to run longer. Also, since we'll be talking to teachers about different subject areas or programs, our questions won't be generic. We'll very likely ask a reading teacher different questions than we'll ask a science teacher or an art teacher. This will also help protect confidentiality and allow us to go into much greater detail with individual teachers.

The more of the scheduling worksheet that can be completed prior to our arrival, the easier it will be for us to collect our data. We would also like to give your teachers and staff as much notice as possible. We'll strive to accommodate your schedule and interview teachers when it causes the least disruption (during their planning periods when possible, before or after school if they don't have planning periods).

Instructions for Completing the Scheduling Worksheets

Write in the white spaces. Begin by completing school start- and end-times. Schedule interviews and observations one per researcher per column. For each listed interview/observation please list the person's name and whether the scheduled time is for an interview or an observation in the "Who" box. We know that your schedule may not be set up in hours, so please list the actual times we should conduct the interview/observation in the "Time" box. Please either list a room number in the "Where" box, or give us a map of the school so we can find everyone. In the "Why" box please briefly list the reason this person was selected for the study. This doesn't need to be an elaborate description and can be abbreviated. For instance, if the person was chosen because of your school's mathematics program, just put "math" in the box. If they operate an Extended School Services program, put "ESS" in the box.

	Draft						
Scheduling Worksheet							
School Start	s at	AM			Schoo	ol Ends at	PM
Please complete as much of the schedule as possible before we arrive. Either FAX it back to us at (270)351-3620 or mail it using the supplied return envelope at least 1 week prior to our visit.							
	chool Visits Study 2			.		<u>-</u>	
Researcher 1	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Before or After School (if necessary)
Who							
Time							
Where							
Why							
Researcher 2	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Before or After School (if necessary)
Who							
Time							
Where							

KDE/HumRRO Draft

Why

Successful School Visits Study 2001. Schedule for Day 2

	chool Visits Study 2					<u></u>	
Researcher 1	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Before or After School (if necessary)
Who							·
Time							
Where							
Why							
Researcher 2	Hour 1	Hour 2	Hour 3	Hour 4	Hour 5	Hour 6	Before or After School (if necessary)
Who							
Time							
Where							
Why							

Appendix B Teacher Interview Guide

- *Date
- *District
- *School
- *Name (First and last name)
- *Subject Taught/Title (if not teacher)
- *1. Name of Program Discussed.
- *2. Type of Program (School-initiated, subject specific, off-the-shelf, national initiative, etc)
- *3. Goals of the program (stated and school-specific)
- *4. How well did the program fit your school? What changes were made (how was it adjusted to meet the school's needs?)
- *5. Describe how the program was started. (Were there special circumstances (grant, interested staff-member, etc) that allowed the program to start?)
- *6. Describe how the program works. (push for as much detail as possible)
- *7. How is the program supported? (role of school, district, teachers, etc.)
- *8. How is the program funded? For how long? Plans for continuation.
- *9. Training requirements.
- *10. Pervasiveness (number of teachers, number of students affected, etc.)
- *11. Age of Program at the school.
- *12. Obstacles to starting the program. Remaining obstacles.
- *13. How do you know the program is having a positive impact on kids?
- *14. Does the program reach beyond your classroom? Subject area?
- *15. Is the program growing/shrinking/maintaining? Why?
- *16. How is the program perceived by the students/parents/admin/other teachers/etc?
- *17. Was there a similar program in place before this one? What happened to it?
- *18. What should I expect to see during my observation?
- *19. Collect a good example of a test/assignment that is part of the program (if applicable).

Appendix C Internet Guide to Programs

The following table presents programs and grants, along with their Web sites, that we found currently in use in the schools we visited.

Program title	Web site
Literacy-reading programs	
America Reads	http://www.ed.gov/inits/americareads
SRA Open Court Phonics	www.sra-
	4kids.com/teacher/phonics/phopen.html
Great Leaps Reading	www.greatleaps.com
Read 180	http://teacher.scholastic.com/read180/
Reading Recovery	www.sfusd.k12.ca.us/programs/rr/RRoverv iew.html
Reading Renaissance/Accelerated Reader program	www.cms.k12.nm/us/mesaweb/AllAboutUs
A 1 . 1D 1	/DynamitePrograms/reading.html
Accelerated Reader	www.perma-bound.com/arinfo.htm
Star Reading	www.epicent.com/software/products/pages/ s/star_reading.html
National Writing Project	www.nwrel.org/scpd/natspec/catalog/natlw
	<u>riteproj.htm</u>
Louisville Writing Project	www.louisville.edu/edu/LWP/general.htm
Earobics (Cognitive Concepts)	www.earobics.com/teachers/t_faq.cfm
Junior Great Books	www.thechairlift.com/~gbf/junior/index.htm 1
Scholastic Read 180	http://teacher.scholastic.com/read180.index.
	htm
Scholastic Reading Counts!	src.scholastic.com/ecatalog/readingcounts/r esearch/index.htm
Mathematics programs	
Accelerated Math	www.epicent.com/software/products/pages/
	<u>a/accelerated_math.html</u>
Connected Mathematics	ccl.northwestern.edu/cm/connected/
STAR Math	www.epicent.com/software/products/pages/
	s/star_math.html
Saxon K-4 Mathematics	www1.saxonpub.com/products/math/primar y/k_4_overview.html
Saxon 4-8 Mathematics	www1.saxonpub.com/products/math/middle
	/4_8_overview.html
Team Accelerated Instruction (TAI): Mathematics	www.ed.gov/pubs/EPTW/eptw6/eptw6q.ht
	<u>ml</u>

Other programs			
PT^3	http://www.ed.gov/teachtech/		
Gen YES	http://www.genyes.org/index.php		
America's Choice for School Design	Www.ncee.org/ac/intro.html		
Principles of Learning	Www.instituteforlearning.org/pol3.html		
Ten Sigma	http://www.tensigma.org		
The Stock Market Game (KY Council on Economic	www.econ.org/SMG.html		
Education)			
Grants			
Comprehensive School Reform Demonstration	www.ed.gov/offices/OESE/compreform/ap		
(CSRD) Program	pro.html		
21 st Century Community Learning Centers	www.ed.gov/21stcclc/		
Rural Community Empowerment Program	www.ezec.gov/welcome/index.html		